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ABSTRACT
An annotated bibliography includes 490 items of research or investigation in adult education, mostly dated 1968 or 1969. They cover adult learning characteristics, program planning and administration, learning environments, instructional methods, curriculum materials and instructional devices, personnel and staffing, education of particular groups, program areas, professional and technical continuing education, management and supervisory development, labor education, occupational training, institutional sponsors, and international perspectives in adult education. Included is an author index, a note on availability of the documents, an order blank for the ERIC Document Reproduction Service, and a listing of other publications of the ERIC Clearinghouse on Adult Education. (eb)

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RESEARCH AND INVESTIGATION IN ADULT EDUCATION

1969 ANNUAL REGISTER

AA000381

ERIC CLEARINGHOUSE ON ADULT EDUCATION

ADULT EDUCATION ASSOCIATION OF THE U.S.A.

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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ROGER DeCROW, DIRECTOR

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RESEARCH AND INVESTIGATION IN ADULT EDUCATION

1969 ANNUAL REGISTER

ROGER DECROW AND STANLEY M. GRABOWSKI
EDITORS

ERIC Clearinghouse on Adult Education

Adult Education Association of the U.S.A.

ABSTRACT

An annotated bibliography includes 490 items of research or investigation in adult education, mostly dated 1968 or 1969. They cover adult learning characteristics, program planning and administration, learning environments, instructional methods, curriculum materials and instructional devices, personnel and staffing, education of particular groups, program areas, professional and technical continuing education, management and supervisory development, labor education, occupational training, institutional sponsors, and international perspectives in adult education. Included is an author index, a note on availability of the documents, an order blank for the ERIC Document Reproduction Service, and a listing of other publications of the ERIC Clearinghouse on Adult Education.

TABLE OF CONTENTS

Introduction	i
Subject Index	iii
Abstracts	1
Author Index	131
Note on Availability	136
ERIC/AE Publications	138
EDRS Order Blank	140

INTRODUCTION

Bulk of material and financial exigencies in the sponsoring agency dictate a small edition of this 1969 Register, but we are pleased that the fourteen year continuity of the series has not been broken. And, of course, copies will always be available from the ERIC Document Reproduction Service.

You will notice that the Register is this year divided into more sections than usual. The four digit numbers refer to sections and the three digit numbers to particular items. We have not shirked the stoop labor of providing copious and captioned cross references. Sections which may appear from the Table of Contents to have no entries, do, however, have cross references to relevant items in other sections. An author index is provided.

Since the Register no longer appears as the Summer issue of Adult Education, we think Fall a better time to bring it out. ERIC/AE is on a campaign to produce a register of adult education dissertations from the years 1963-1967, which may account for the larger number of dissertations noted this year. We are also beginning to tap the flow of master's theses. We include some important bibliographies and a wide range of data collecting "investigations". Finally, research effort in adult education is unquestionably growing, as the educational problems of American adults mount to crisis. Thus, the Register has grown to formidable bulk.

We are grateful to Roy Ingham of Florida State University and James Draper of the Ontario Institute for Studies in Education for commentary on the general procedures used in the Register. We thank the researchers who have supplied copies of their reports and urge all who produce useful documents (whether research or not) to forward two copies to ERIC/AE.

Those who struggle to assemble any part of the literature of adult education will recognize a revolutionary improvement in accessibility of reports, for many, perhaps most, of the items in the Register are available in microfiche or hard copy reproduction from ERIC or from the Federal Clearinghouse for Scientific and Technical Information. We have done our

best to give a source for the others, which are, for the most part, published in standard journals and books. Please read carefully the note on availability of documents, for ERIC/AE cannot supply copies. Do ask our advice, however, as a last resort, should you have some harrowing difficulty in obtaining a particular document.

Many documents in this Register have been reported in Research in Education (RIE), the monthly catalog of ERIC Documents submitted by the 19 Clearinghouses. RIE is available from the Superintendent of Documents, U.S.Government Printing Office, Washington, D.C. 20402, for $21.00 per year ($26.25 outside the United States).

A new companion service to RIE, covering over 250 educational journals, Current Index to Journals in Education is published by CCM Information Corporation, 909 Third Avenue, New York, New York 10022 (subscription for 12 issues $34.00). Both of these catalogs should be scanned regularly to be informed of reports of research and investigation.

Roger DeCrow, Director
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SUBJECT INDEX

SECTION	SUBJECT	ITEM NUMBER
0000	INFORMATION SOURCES	
	0040 Information Service - Related Fields	1
0100	PHILOSOPHY	2
0150	LEGISLATION	3
0175	FINANCE	4 to 5
0250	STUDIES AND PLANNING - LOCAL LEVEL	6 to 8
0350	STUDIES AND PLANNING - NATIONAL LEVEL	9
0500	HISTORY	10 to 12
	0530 History-Foreign	
0550	BIOGRAPHY	
	0580 Biography-Foreign	
0900	ADULT EDUCATION AS A FIELD OF STUDY	13 to 14
	0950 Adult Education Research	15 to 17
	1990 Reviews, Bibliographies, Information Sources	18 to 22
1100	ADULT LEARNING CHARACTERISTICS	
	1120 Mental Perceptual Abilities	23 to 28
	1160 Psychological, Personality Factors	39 to 58
	1200 Age Differences	59 to 64
	1300 Participation Patterns of Adults	65 to 68
1500	PROGRAM PLANNING AND ADMINISTRATION	
	1510 Assessing Educational Needs	
	1550 Determination of Objectives	69
	1600 Recruitment	70 to 71
	1650 Selection, Prediction of Success	72 to 83
	1700 Retention	84 to 88
	1750 Counseling, Guidance	89 to 93
	1800 Student Aid and Services	94
	1850 Administrative Practices	95 to 100
	1890 Relations with Governing, Advisory Groups	101 to 105
2200	LEARNING ENVIRONMENTS	
	2210 Community Education and Development	106 to 116
	2230 Rural Communities	117 to 124
	2240 Urban Environment	125
	2300 Residential Education	126 to 128
2600	INSTRUCTIONAL METHODS	129 to 134
	2630 Teaching Styles and Techniques	135 to 148
	2730 Lecture	
	2740 Personal Contact, Visits	
	2780 Programmed Instruction	149 to 154
	2800 Correspondence Study	155 to 157

SECTION	SUBJECT	ITEM NUMBER
	2900 Discussion	158 to 162
	2920 Human Relations, Laboratory Training	163 to 186
	2950 Simulation, Gaming	187 to 189
	3000 Conferences, Institutes, Workshops	190 to 191
	3050 Demonstration	192 to 193
	3060 Travel Study	194 to 196
	3120 Multi-Media Methods	197 to 198
	3150 Audio-Visual	199 to 200
	3200 Educational Television	201 to 205a
3400	CURRICULUM MATERIALS	206 to 207
3500	INSTRUCTIONAL DEVICES	208 to 211
3600	LEARNING FACILITIES	
3800	PERSONNEL AND STAFFING	
	3820 Personnel Policies and Practices	212 to 218
	3900 Staff Training	
	4000 Teachers, Leaders, Change Agents	219 to 233
	4100 Administrators	234 to 238
4300	EVALUATION	
4600	EDUCATION OF PARTICULAR GROUPS	
	4620 Age Groups	
	4625 Young Adults	239 to 241
	4630 Middle-Aged	242 to 244
	4635 Older Adults	245 to 252
	4655 Education of Women	253 to 266
	4680 Education of Men	267
	4700 Aptitude Groups	
	4710 Low Aptitude	268
	4730 High Aptitude	
	4750 Disadvantaged Groups	
	4760 Economic Disadvantagement - General	269
	4800 Negro	
	4825 Spanish Speaking	270
	4850 American Indians	271 to 272
	4870 Migrant Workers	273
	5000 Mental Disability	274
5200	PROGRAM AREAS	
	5230 Adult Basic Education	275 to 291
	5280 Literacy Education-Foreign	292 to 293
	5400 Higher Education-Academic Programs	294 to 295
	5500 Community Services and Programs	296 to 307
	5550 Community Development Programs-Foreign	308 to 314
5700	PROFESSIONAL, TECHNICAL CONTINUING EDUCATION	315 to 316
	5750 Engineering, Architecture	317 to 320
	5800 Life Sciences	321
	5850 Medicine and Health	322 to 324
	5900 Education	325 to 326
	5950 Law	327
	6000 Religion	328 to 330

SECTION	SUBJECT	ITEM NUMBER
	6050 Public Administration	331 to 332
	6100 Other Professions	333 to 334
6200	MANAGEMENT AND SUPERVISORY DEVELOPMENT	335 to 352
6300	LABOR EDUCATION	353 to 355
6500	OCCUPATIONAL TRAINING	356 to 372
	6550 Unskilled, Disadvantaged	373 to 399
	6600 Clerical, Sales	400 to 402
	6650 Service	403 to 405
	6700 Agriculture, Home Economics	406 to 420
	6750 Assembly, Maintenance	421 to 428
	6800 Structural Work	429
	6850 Other Occupations	430 to 449
7000	HOME, FAMILY, PARENT EDUCATION	450 to 461
7050	ARTS, CRAFTS, RECREATION	462
7150	CROSS CULTURAL EDUCATION	463 to 464
7500	INSTITUTIONAL SPONSORS	
	7510 Colleges and Universities	465 to 469
	7600 Cooperative and Rural Extension	
	7700 Junior Colleges	470
	7800 Public Schools	471 to 474
	7900 Business and Industry	475
	8000 Armed Forces	476 to 479
	8050 Unions	
	8100 Religious Organizations	480 to 481
	8200 Libraries, Museums	
	8250 Proprietary Schools	
	8500 Federal Government	482
	8550 Correctional Institutions	
9000	INTERNATIONAL PERSPECTIVE IN ADULT EDUCATION	
	9020 International and Comparative Studies	
	9040 Developing Nations	
	9350 Canada	
	9400 Latin America	484
	9500 Europe	
	9520 Great Britain	
	9530 Scandinavia	485
	9540 Germany	
	9570 Yugoslavia	
	9650 Near East	
	9700 Africa	486
	9800 Asia	487 to 488
	9950 Australia, New Zealand	489 to 490

0000 INFORMATION SOURCES

0040 Information Services-Related Fields

1. HANDBOOK OF INFORMATION SOURCES IN EDUCATION AND THE BEHAVIORAL SCIENCES. Gates, Jesse L. and Altman, James W. American Institute for Research in Behavioral Sciences. May 1968. 185p. EDRS Order Number ED 020 447; price in microfiche $0.75, in hard copy $9.35.

   Detailed descriptions of guides and directories, multidisciplinary information centers, specialized information centers, data repositories, and abstracting and indexing services.

See also: 360 vocational, industrial training trends in CIRF Abstracts; 361 Great Britain, Ministry of Technology, R & D Abstracts; 479 HumRRO bibliography.

0100 PHILOSOPHY

2. ON BEHALF OF ADULT EDUCATION, A HISTORICAL EXAMINATION OF THE SUPPORTING LITERATURE. Notes and essays on education for adults, 56. Cotton, Webster E. Center for the Study of Liberal Education for Adults, Boston. 1968. 90p. EDRS Order Number ED 023 945; price in microfiche $0.50, in hardy copy $4.60.

See also: 9 a study of adult education in the United States; 481 adult education philosophy of Anglican Church of Canada.

0150 LEGISLATION

3. OPENING THE DOORS: JOB TRAINING PROGRAMS. A REPORT TO THE COMMITTEE ON ADMINISTRATION OF TRAINING PROGRAMS. PART ONE - RECOMMENDATIONS AND SUMMARY FINDINGS. Greenleigh Associates Inc., New York. February 1968. 161p.

   As a result of a study of manpower programs which revealed waste, inefficiency, and duplication, 25 recommendations are made for statutory administrative changes. The formation of a single agency for administering the programs is not desirable. Funding of new programs should be incorporated into the existing administrative framework. Rather than stripping away existing programs by legislative action, delegation of programs by agreement should be encouraged. A national manpower policy, both long-range and immediate, should encompass various populations and types of training. Sufficient funds should be allotted to make significant inroads into the problems. The time period for funding should be longer than twelve months and the process simplified. Grants for planning, flexible utilization of funds, regional boundaries, program reports, evaluation, staff training, and the quality of training should be given attention.

See also: 6550 Occupational Training-Unskilled, Disadvantaged; 276 Federal Adult basic education programs in Missouri; 315 implications of Industrial Training Act for British engineering industry.

0175 FINANCE

4. A HISTORICAL ANALYSIS OF THE G.I. BILL AND ITS RELATIONSHIP TO HIGHER EDUCATION.

Olson, Keith W. Syracuse University, Research Institute, Office of Education, Washington, D. C. Bureau of Research, 1968. 23p. EDRS Order Number ED 024 330; price in microfiche $0.25, in hard copy $1.25.

Designed as a reward to servicemen and to lessen the economic effects of demobilization, the Bill made a great impact upon higher education. (1) It provided equality of opportunity unparalleled in history. (2) Veterans demonstrated that far more youth could benefit from education than had done so. (3) Veterans helped to alter the balance between public and private enrollments. (4) Popular attention and the success of the Bill forced a re-examination of the objectives of higher education. (5) The married student became an accepted part of academic life. (6) Increased federal aid was made possible, especially for construction, scholarships and 2 more G.I. Bills. The number who attended college under the Bill far exceeded expectations and some educators feared the influx would lower educational standards. This proved to be another of many erroneous assumptions.

5. THE RELATIONSHIP OF ADULT EDUCATION PROGRAM DEVELOPMENT IN MICHIGAN TO STATE FISCAL POLICY. Anttonen, Elmer Soini. Michigan State University. Ed.D. Thesis. 1967. 186p. University Microfilms, Order Number 67-1,595; price in microfilm $3.00, in Xerography $8.60.

This study dealt with the participation of the public school districts of Michigan in adult education programs, and with changes since the end of the state financial aid to these programs in 1959. Adult education enrollments increased sharply during the period of state financial aid. Since the discontinuation of this aid, enrollments have decreased. Program supervision was being done by personnel devoting less than 1/4 of their time to it. Programs were financed mainly by student fees; local public school districts furnished 30% of total program funds. Adult education programs in Michigan have never served over 5.6% of the adult population. Over 72% of all courses and 70% of all enrollments were in urban districts with populations of 25,000 or more. Sixty percent of the cities under 25,000 offered no adult education programs; 11% of rural fourth class districts conducted such programs.

See also: 9 study of Federal role in adult education; 472 public school adult education in Nebraska.

0250 STUDIES AND PLANNING-LOCAL LEVEL

6. PROGRAM INVENTORY AND WORKBOOK; MASSACHUSETTS ADULT EDUCATION PLANNING CONFERENCE. (PROVINCETOWN, April 9-10, 1968). Massachusetts State Advisory Council on Education, Boston, 1968. 60p. Available from the Massachusetts State Advisory Council on Education, Boston, Massachusetts.

This document presents an overview of adult education in Massachusetts, including the limiting of the number of State departments; the effects of reorganization of education in 1965; the creation of the Advisory Council; the duties of the local school committees; and the confusion of meanings attached to the term "Department of Education." The problems are communication, coordination, control, curriculum, and compatibility of programs.

7. EDUCATION AND TRAINING SURVEY, CITY OF BEVERLY, COMMONWEALTH OF MASSACHUSETTS. Shively, Harold E. North Shore Community College, Beverly, Massachusetts. December 1967. 82p. EDRS Order Number ED 017 257; price in microfiche $0.50, in hard copy $4.20.

8. GUELPH ADULT PARTICIPATION PATTERNS; FIRST REPORT OF THE CITY OF GUELPH PARTICIPATION SURVEY. Blackburn, Donald J. Guelph University (Ontario) 37p. August 1968. EDRS Order Number ED 023 985; price in microfiche $0.25, price in hard copy $1.95.

In this survey of adults randomly chosen from the October 1967 voters' list for Guelph, Ontario, information was gathered on individual and socioeconomic characteristics (including age, sex, marital and family status, income, education, occupation, and ethnic background); attitudes toward Guelph as a place to live and toward existing University of Guelph extension services; leisure activities (sports, entertainment, organizational membership, church attendance, reading and others); and educational preferences, attitudes, and participation patterns.

See also: 297 urban programs of Baltimore area universities; 344 management development in Long Island industries; 364 vocational education needs in Goshen County, Wyoming; 367 finance of vocational education in Birmingham school system; 400 clerical training in firms of Boston area; 466 history of adult education in three St. Louis universities.

0350 STUDIES AND PLANNING-NATIONAL LEVEL

9. A STUDY OF ADULT EDUCATION IN THE UNITED STATES. CSLEA RESEARCH REPORTS. Liveright, A.A. Center for the Study of Liberal Education for Adults, Brookline, Massachusetts. 147p. 1968. EDRS Order Number ED 021 201; price in microfiche $0.75; price in hard copy $7.45.

Based on information gathered in 1965 and 1966 for the United States Office of Education, this study of adult education in the United States begins with a definition of terms and of underlying educational philosophy, then reviews the history of American adult education, current patterns of participation, the adult education profession (including research and the training of adult educators), the nature and scope of Federal activities and policies, the present state of adult education activities by the mass media and other non-Federal groups and institutions, and areas of concern in the changing field of adult education. Recommendations for action are set forth in such areas as data reporting, research design, information dissemination, innovation and experimentation, interagency cooperation and program coordination within the Federal government, and the recruitment, development, and training of qualified personnel. (The document includes tables and chapter references.)

See also: 3 recommendations on job training programs; 155 correspondence study; 216 industrial training directors; 220 national conference on adult Jewish education; 242 labor market for men 45-59 years of age; 243 industrial employment of retired military; 289 library service to illiterates; 321 postdoctoral training in clinical psychology; 342 corporation training in labor relations; 348 management training of chief sales executives; 351 management training for overseas; 356 educational levels of adult workers; 358 transfer of military skills to civilian life; 374, 378, 379 manpower retraining; 418 wage earning home economics course development; 440 training in correctional institutions; 469 history of university extension; 477 history of army educational programs; 482 education in federal R & D labs; 483 history of educational television.

0500 HISTORY

10. APPRENTICE IN GRAY: ADULT EDUCATION IN THE CONFEDERACY. Puder, William H. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). February 1969. 26p. EDRS Order Number ED 026 600; price in microfiche $0.25, price in hard copy $1.40.

An exploration was made of several types of adult education within the Confederate States of America during 1861-65, and the socioeconomic and cultural background factors. The following activities were identified; apprenticeship training; extension training of army physicians through discussion groups, lectures, and an information-reporting network; religious instruction of civilians through newspapers and special lecturers; and adult basic education for illiterates in the army and on the home front. Results of this study support the contention that adult education tends to develop in response to a social crisis or other urgent need.

11. THE AMERICAN LYCEUM. Stoddard, Paul Wakelee. Yale University. Ph.D.Thesis. 1967. 295p. University Microfilms Order Number 67-2,980; price in microfilm $3.80; price in Xerography $13.30.

This is a historical study of the great lecture movement which played an important part in United States history, particularly in New England, around the period 1825-1850.

12. THE LIFE CYCLE OF AN ADULT EDUCATION ENTERPRISE -- THE SWARTHMORE CHAUTAUQUA. FINAL REPORT. Dillavou, George J. Chicago University, United States Office of Education, Washington, D.C., Bureau of Research. March 1968. 22p. EDRS Order Number ED 024 787; price in microfilm $0.25, price in hard copy $1.20.

A study of the Swarthmore Chautauqua as an adult education enterprise was conducted by investigating documents from many sources. Several tape recorded personal interviews were used to add to the documentation, and visits were made to towns where the Chautauqua played for the purpose of reading the reviews and talking to persons who attended the Chautauqua. Changes in the special climate of the United States brought about by World War I were soon reflected in the fortunes of circuit Chautauqua. It rose to its peak in attendence and profits in the early 1920's and began to decline as a marked influence on American life by 1925. The availability of other forms of education and entertainment brought about a decline in attendance and ticket sales, and by 1926, the Swarthmore Chautauqua was in decline.

See also: 2 literature of liberal adult education; 4 GI Bill: 9 adult education in the United States; 127 residential education; 155 correspondence study; 344 management development in Long Island industries; 354 labor education in Great Britain and the United States; 367 vocational education in Birmingham school system; 370 vocational education in ten countries; 466 university adult education in St. Louis; 468 American Institute of Sacred Literature; 469 university extension, 1900-1965; 472 public school adult education in Nebraska; 473, 474 immigrant education in New York City schools; 476 Commission on Implications of Armed Forces Educational Programs, 1945-1948; 477 army educational programs; 480 Protestant adult education in twentieth century; 483 educational television.

0530 HISTORY-FOREIGN

See: 296 Antigonish movement, Nova Scotia; 313 university extension in Nigeria; 413 agricultural education in Yugoslavia; 485 folk high schools in Sweden; 490 bibliography in Australian adult education, 1935-1965.

0550 BIOGRAPHY

0580 Biography-Foreign

See: 484 Amanda Labarca, Chile

0900 ADULT EDUCATION AS A FIELD OF ACADEMIC STUDY

13. MEETING USERS' NEEDS - WHERE ADULT EDUCATION AND INFORMATION SCIENCE INTERACT. Shearman, John. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). 1969. 13p. EDRS Order Number ED 025 735; price in microfiche $0.25, in hard copy $.75.

Adult education and information science can be viewed as aspects of the endeavor to communicate collective human knowledge and experience. Where self-learners "need to know" intersects with information science skills in meeting user needs, dynamic interaction may take place. Information systems research has been concerned with determining what is meant by satisfying user needs, clarifying what those needs are, and building systems that meet those needs.

14. A STUDY OF PERCEPTUAL AND ATTITUDINAL CHANGE WITHIN A COURSE ON ADULT EDUCATION METHODS. Menlo, Allen. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). 1969. 20p. EDRS Order Number ED 025 734; price in microfiche $0.25; price in hard copy $1.10.

A study was made of personal changes in graduate students who took a 15-week university course in adult education methodology. Course objectives were to help class members (1) to see themselves as able to aid other adults in their learning, and decision-making, and (2) to perceive other adults as having the potential desire to take responsibility for their own learning. Learning events involved the total group, ad hoc subunits, permanent "home-based" groups, permanent out of class triads, individual outside reading of distributed articles and self-chosen books, individual and small group consultation, and ad hoc work committees. Gains in positive self-perception and in readiness to share leadership with others were significant; the influence of self-perception on changes in readiness to share leadership were not significant.

See also: 3900 Staff Training; 4000 Teachers, Leaders, Change Agents; 4100 Administrators; 9 study of adult education in the United States; 95 review of principles of adult education administration; 322 model for studying professionalism with implications for adult education.

0950 ADULT EDUCATION RESEARCH

15. EDUCATING THE ADULT EDUCATOR: PART 2. TAXONOMY OF NEEDED RESEARCH: REPORT FROM THE ADULT RE-EDUCATION PROJECT. Kreitlow, Burton W. Wisconsin University, United States Department of Health, Education and Welfare, Cooperative Research Project Office of Education. May 1968. 27p. EDRS Order Number ED 023 031; price in microfiche $0.25, hard copy $1.45.

Established a framework for classifying areas of needed research in the field of adult education. The framework is based on application--learning, teaching, social change, guidance, and other activities. Some of the needs identified are tied to a specific discipline or an applied field, while others are associated with certain program areas.

16. HISTORY AND SOCIAL SCIENCE: COMPLEMENTARY APPROACHES TO ADULT EDUCATION RESEARCH. Carlson, Robert A. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). February 1969. 7p. EDRS Order Number ED 025 719; price in microfiche $0.25, in hard copy $.45.

Expresses the view that interpretive, humanistic adult education history should be oriented toward "the unique, the particular, and the individual," with statistical analysis and other scientific methodology confined to social science studies.

17. EVALUATION RESEARCH IN ADULT EDUCATION. Brunner, Edmond de S. 6p. In Centro Sociale, International Issue; v14 n76-78 p97-102, 1967.

Early evaluation research was based on records of enrollment, attendance, and course attrition. The number of course completers passing examinations or tests, the number of prospective registrants, and relationships between participation and the socioeconomic and personal characteristics of participants, became in turn important means of evaluation. The need for initial statements of program objectives has also been recognized. Moreover, discrepancies have long been noted between student and educator objectives, but participant satisfaction scales such as the Stanton and Lazersfeld program analyzer can help avoid such discrepancies. More elaborate techniques such as participant observers or extension studies of diffusion and adoption can also be used.

See also: 287 researcher's role in innovative process in an adult basic education program.

0990 Research Reviews, Bibliographies, Information Sources

18. ABSTRACTS OF PAPERS PRESENTED TO THE NATIONAL SEMINAR ON ADULT EDUCATION RESEARCH, FEBRUARY 11-13, 1968 IN CHICAGO. ERIC Clearinghouse on Adult Education, Syracuse, New York. September 1968. 30p. EDRS Order Number ED 024 001; price in microfiche $0.25, in hard copy $1.60.

Abstracts are presented of 23 research papers on attitude changes resulting from supervisory training; nonparticipation in vocational retraining; methods and techniques (including mass media, small group discussion, correspondence study, and the use of programed instruction for health personnel and in human relations training); preferred adult educational methods among potential participants; adoption of new agricultural practices; dental health instruction and counseling; information systems development; program administration; attitudes and performance of extension agents; information needs and information seeking; faculty attitudes toward programs of continuing higher education; regional planning; homemaking education; effects of structure and sequence on adult learning; and professional career patterns. Basic adult education information sources, current information sources, and other publications of the ERIC Clearinghouse on Adult Education are also listed.

19. RESEARCH AND INVESTIGATIONS IN ADULT EDUCATION; 1968 ANNUAL REGISTER. DeCrow, Roger, Ed., and Grabowski, Stanley, Ed. ERIC Clearinghouse on Adult Education; Syracuse, New York. Adult Education Association of U.S.A., Washington, D. C. 1968. 90p. EDRS Order Number ED 023 993; price in microfiche $0.50, in hard copy $4.60.

20. ADULT EDUCATION RESEARCH. Basic information sources, Number 1. ERIC Clearinghouse on Adult Education, Syracuse, New York. January 1968, 4p. EDRS Order Number ED 018 704, price in microfiche $0.25, in hard copy $.30.

Basic references and bibliographic sources on adult education research are

presented.

21. BIBLIOGRAPHY OF RESEARCH IN ADULT EDUCATION AND UNIVERSITY EXTENSION, CONDUCTED AT THE UNIVERSITY OF WISCONSIN, SEPTEMBER 1966-JUNE 1968. Joint Office of Study, Research and Development in Adult Education and University Extension. Wisconsin University. 1968. 17p. EDRS Order Number ED 026 555, price in microfiche $0.25, in hard copy $0.95.

A classified bibliography is presented of 130 University of Wisconsin graduate theses from the Departments of Agricultural and Extension Education, Curriculum and Instruction, Agricultural Journalism, Rural Sociology, Educational Administration, Educational Psychology, Behavioral Disabilities, Educational Policy Studies, and Art Education.

22. DISSERTATIONS IN EXTENSION EDUCATION, CORNELL UNIVERSITY, 1948-1966. Cornell University, Extension Education Division. September 1966. 25p.

The 264 doctoral and masters theses are listed by year completed and indexed under 10 general headings.

See also: 108 trends in research in foreign development; 111 review of research on education and social change in developing nations; 163 conference and annotated abstracts on sensitivity training; 165 review of laboratory training research; 201 abstracts of research in instructional television and film since 1950; 361 Great Britain, Ministry of Technology, R & D Abstract service; 420 home economics research abstracts, 1966; 461 home economic research abstracts, 1967 on family relations and child development; 479 HumRRo bibliography.

1100 ADULT LEARNING CHARACTERISTICS

1120 Mental, Perceptual Abilities

23. THE NATURE OF HUMAN INTELLIGENCE, Guilford, J. P. 1967. 538p. Available from McGraw-Hill Book Company, New York.

24. INTELLECTUAL DECLINE. Guilford, J. P. Chapter 18 in THE NATURE OF HUMAN INTELLIGENCE by J. P. Guildford, published by McGraw-Hill Book Company, New York, 1967. 26p. EDRS Order Number ED 022 099, price in microfiche $0.25, in hard copy $1.40.

25. GROWTH AND DECLINE OF NATURAL AND ACQUIRED INTELLECTUAL CHARACTERISTICS. Trembly, Dean, and O'Connor, Johnson. 4p. In Journal of Gerontology; v21 n1 p9-12 1966.

A study was made of test scores in English vocabulary, tonal memory, pattern design memory, number memory, and inductive reasoning for 33,283 males from below 10 to above 60 years. Scores on vocabulary showed a rapid early growth, then a gradually slower but constant growth. The four natural intellectual factors showed rapid early growth, reached a plateau, and then declined. Each aptitude showed a different age of maturity and a different age of decline.

26. THE RELATIONSHIP BETWEEN LEARNING AND INTELLIGENCE. Carver, Ronald P. and DuBois, Philip H. Washington University, St. Louis, Missouri. 4p. In Journal of Educational Measurement; v4 n3 p133-6 Fall 1967.

The General Classification Test seven learning tests were given to 269 U.S.

Navy enlisted men. Two of the learning tests involved initial and final measures on programed instructional materials; the others tested various kinds of verbal and nonverbal learning. Correlations between intelligence and residual gain scores and between verbal ability and verbal learning were interpreted as negating the generalization that learning and intelligence are unrelated when a gain measure of learning is used.

27. RELATIONSHIPS BETWEEN CONCEPT LEARNING AND SELECTED ABILITY TEST VARIABLES FOR AN ADULT POPULATION. REPORT FROM THE PROJECT ON SITUATIONAL VARIABLES AND EFFICIENCY OF CONCEPT LEARNING. Jones, Dorothy. Wisconsin University. May 1968. 65p. EDRS Order Number ED 024 331, price in Microfiche $0.50, hard copy $3.35.

A verbal concept-learning task was devised which permitted the externalizing and quantifying of behavior at 6 points in the learning process. A pilot study evaluated the effects of 4 experimental conditions on learning. One of the conditions, described as "postulates removed, no feedback" was employed in the factor-analytic study. The learning task and 16 ability tests purporting to measure reasoning, memory, and verbal factors were administered to 102 college women. Major conclusions were (1) that the psychological constructs underlying the learning task are an ability to make multiple discriminations and an ability to respond to stimulus items as representatives of a class rather than as individual entities and (2) that the pattern of loadings on each task factor is evidence of an occurrence of learning. The type of learning is specific to the learning task and the abilities isolated by it.

28. THE RELATIONSHIP BETWEEN AGE AND INFORMATION PROCESSING CAPACITY AND AGE AND CHANNEL CAPACITY OF ADULTS. Carpenter, William Lester. Florida State University. Ed.D.Thesis. 1967. 149p. University Microfilms Order Number 68-7787, price in microfilm $3.00, in Xerography $7.00.

This study sought to determine if there is a change in information processing and channel capacity as the human organism grows older, and if this relationship is altered with a change in stimulus complexity and dimensionality of the stimulus presented. With the human organism considered as a communication system, the use of absolute judgments to measure judgmental discrimination accuracy was extended to measure the subjects over a 45 year age range and under simulated classroom conditions. Using visual stimuli, 74 subjects judged size of dark squares on a light background in three tests and the location of the placement of a dot in a grid pattern in two tests. As predicted, performance declined as age increased. In three of the five tests this decline was statistically significant. (.05 level); in the other two tests the decline was in the predicted direction. Since the least complex tests were presented first, it was assumed that this high-anxiety state masked the performance of the older subjects in the earlier tests, but as this state faded out older subjects reached their peak performance which was very little if any below that of the younger subjects.

29. THE RELATIONSHIP BETWEEN AGE AND INFORMATION PROCESSING CAPACITY OF ADULTS. Report Number 7. Carpenter, William L. North Carolina University. April 1968. 70p. EDRS Order Number ED 018 763, price in microfiche $0.50, in hard copy $3.60.

Change in information processing and channel capacity with age was studied, and possible altering of this relationship with a change in complexity and dimensionality of the stimulus presented. Visual stimuli were projected on a screen to four groups ranging from 23 to 68 years, in a simulated classroom. Performance declined as age increased in three of the five tests, containing the least complex stimulus situation. All subjects scored higher on the multidimensional stimulus presentations. Males outscored females in all tests.

30. THE MEASUREMENT OF MEMORY IN CLINICAL PRACTICE. Williams, Moyra. 16p. In British Journal of Social and Clinical Psychology; v7 pt 1, p19-34, February 1968.

A battery of tests for the measurement of memory is presented for assessment of four memory functions, and their comparison by means of decile scores. These are: Digit Span, Nonverbal Learning (Rey-Davis test), Word Learning, and Delayed Recall.

31 THE FULFILLMENT OF PROMISE; 40-YEAR FOLLOW-UP OF THE TERMAN GIFTED GROUP. Oden, Melita H. 91p. In Journal of Genetic Psychology Monographs; v77 n1 p3-93, February 1968.

The longitudinal Terman Study of the Gifted, begun in 1921-22, sought to discover the physical, mental, and personality traits characteristic of intellectually superior children. A 1960 followup found that the Terman subjects had maintained their initial superiority in intelligence, health, and other areas., and had lived up to their abilities. Comparison of the most and least successfull of the gifted men gave evidence that intellect and achievement are far from perfectly correlated, and that emotional stability and a composite of the personality traits that generate a drive to achieve are also necessary.

32. VALIDITY OF THE SRA NON-VERBAL FORM FOR ADULTS. Stratton, Albert J. 5p. In Psychological Reports; v22 1968.

The WAIS and the Science Research Associates Non-Verbal (SRA-NV) were administered to a sample of 100 subjects; 20 from each of five age groups. Conclusions are that the SRA-NV is an inadequate estimator of the criterion score and the SRA-NV's lack of age norms introduces serious error in the intellectual assessment of persons past 35.

33. VISUAL AND AUDITORY INFORMATION PROCESSING IN CHILDREN AND ADULTS. Carterette, Edward C., and Jones, Margaret Hubbard. U.S. Office of Education, Washington, D.C. Cooperative Research Program. 3p. In Science; v156 n3777 p986-8 May 19, 1967.

Children of three ages were compared with adults in a recognition experiment requiring continuous processing of information. In adults, visual processing of information is at least as good as auditory.

34. AGE DIFFERENCES IN PRIMARY MENTAL ABILITY FACTORS. Horn, John L., and Cattell, Raymond B. 11p. In Journal of Gerontology; v21 n1 p210-20 1968.

The theory of fluid and crystallized intelligence was discussed. Estimates of primary mental activities were obtained for a sample in which the age groupings extended from the teens to ages 40-61. These abilities were grouped as primarily fluid, primarily crystallized, a mixture of the two, or markers for general visualization, speediness, carefulness, or fluency dimensions. Primary abilities classed as "primarily fluid" showed a decline with age beginning in the early twenties; primaries classed as "primarily crystallized" showed improvement with age. Primary abilities which split their variance between the fluid and crystallized dimensions, and thus seemingly allowed a subject to compensate for lack of one with a surplus of the other, neither systematically declined nor systematically rose. The mean performance for general visualization was greatest for ages 20-28 and dropped off systematically for the two age groupings on either side. Trends for the speediness and carefulness submeasures were variable; some showed slight decline, others rose with age.

35. ABILITY SCORES AS RELATED TO AGE AMONG MALE JOB APPLICANTS. Thumin, Fred J. 3p. Reprint from Journal of Gerontology, v23 n3 July 1968.

The relationship between ability test performance and chronological age was studied among 186 male job applicants between the ages of 19 and 56. Tests measured mental ability (Otis Self Administering Test of Mental Ability), numerical and verbal reasoning and word fluency (Employee Aptitude Survey), and vocabulary, reading speed, and reading comprehension (Reading Comprehension Test, from Cooperative English Series). Participants were divided into four homogeneous groups with mean ages 24.8, 31.4, 37.7, and 45.1 years. With the exception of numerical reasoning, performance did not vary significantly on any of the tests as a function of chronological age, nor were middle aged job applicants automatically penalized in timed tests.

36. COGNITIVE STYLE DIFFERENCES BETWEEN ENGINEERS AND COLLEGE STUDENTS. Barrett, Gerald V. and Thornton, Carl L. 5p. In Perceptual and Motor Skills; v25, p789-793, 1967.

The description of Witkin's field-independent individuals as those who tend to be analytical, logical, and able to extract subtle aspects from problems for analysis bears a close resemblance to the description of engineering job functions. It was therefore hypothesized that engineers would be more field-independent than Witkin's standardization sample. It was determined that 46 engineers and technicians were significantly more field independent, as measured by the rod-and-frame test, than Witkin's standardization sample of male college students. Alternate explanations for the obtained results are discussed, including intelligence, sampling and shift to adult status.

37. THE PSYCHOLOGY OF MEMORY--1960-1964: MONOGRAPH SUPPLEMENT 5-V25. Levy, C. Michael; And Others. Reprint from Perceptual and Motor Skills; v25, 31p. 1967.

This bibliography contains 760 items representing such aspects as retention, recall, interference, time factors, intelligence, task difficulty, and the effects of physiological and emotional factors.

38. ADULT LEARNING CHARACTERISTICS. CURRENT INFORMATION SOURCES, NO. 21. ERIC Clearinghouse on Adult Education, Syracuse, New York. November 1968. 49p. EDRS Order Number ED 024 014, price in microfiche $0.25, in hard copy $2.55.

Eighty-two abstracts under the following headings: (1) Mental and Perceptual Abilities, (2) Personality and Social Role Factors, and (3) General Bibliographies.

See also: 6550 Occupational Training - Unskilled, Disadvantaged; 46 personality of bright adults; 48MMPI and Otis scores at various ages; 64 effect of task complexity and stimulus duration on perceptual-motor performance in two age groups; 73 prediction of academic achievement in extension students; 87 symtomatology in army recruit training; 114 selective perception of messages in community programs; 131 relating training methods to learner characteristics; 148 structure and sequence in learning tasks; 241 attitudes toward adult education of rural youth; 270 intelligence and social character of Spanish American young adults; 278 intelligence related to reading gain in literacy program; 279 correlation of WAIS and Ohio Literacy Test; 369 vocational evening class students in English further education; 398, 399 feasibility of vocational training for Group IV (low aptitude)enlisted men.

1160 Psychological, Personality Factors

39. PSYCHOLOGICAL ASPECTS OF ADULT DEVELOPMENT, ABSTRACTS OF RESEARCH. Knox, Alan B,;

and others. Columbia University. 1967. 32p. EDRS Order Number ED 022 091, price in microfiche $0.25, in hard copy $1.70.

The abstracts focus on three aspects of adult development--physiology, personality and learning.

40. SELF-CONCEPT METADIMENSIONS AND OCCUPATIONAL BEHAVIOR IN YOUNG ADULTHOOD: A CONTENT ANALYSIS OF LONGITUDINAL DATA. Bothwell, James Lowe. Columbia University. Ph.D.Thesis. 1967. 181p. University Microfilms Order Number 67-14,027, price in microfilm $3.00, in Xerography $8.40.

To explore the independence, reliability, and validity of metadimensional measures, 112 boys were interviewed at the 9th and 12th grade levels to obtain self-concept data for an analysis of nine structural, self-concept metadimensions. Self-referent sentences, defined as those indicative of positive or negative evaluations, were written on cards for later analysis. The metadimension assessments were correlated with intelligence and other characteristics assessed at both the 9th and 12th grades, as well as with 40 indices of occupational and other behavior obtained when the subjects were about 25 years of age. Of the nine measures, six (clarity, self-esteem, abstraction, harmony, stability, idiosyncrasy) appeared relatively independent.

41. THE RELATION OF RE-CREATION TO A THEORY OF EGO DEVELOPMENT. Colley, Louise Annie. Wisconsin University. 1966. 211p. University Microfilms Order No. 66-9133, price in microfilm $3.00, in Xerography $9.70.

42. THE RELATION OF RE-CREATIVE EXPERIENCE TO EGO STAGE DEVELOPMENT. Colley, Louise. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968.) Guelph University, Ontario Wellington College. 1968. 4p. EDRS Order Number 018 727, price in microfiche $0.25, in hard copy $0.30.

The relationship of ego-stage development (Erik Erickson) to the experiences adults identified as leading to re-creation was explored, using data from women graduate students at the University of Wisconsin. For the most part, ego stage development was not reflected in re-creative experiences. However, a statisically significant association between ego stage development and re-creative experience was found among psychologically mature subjects when they were in a positive, enthusiastic, creative mood before the experience. Under these same conditions, intensity of re-creation was most frequently high. It was concluded that the tendency is to regress to a lower stage of ego development in obtaining re-creation. Maturity and positive dynamic precondition are contributing factors in gaining re-creation in experiences of progressive adaption.

43. EGO-STAGE DEVELOPMENT AND INTERACTION. Fay, Francis Anderson, Wisconsin University. Ph.D.Thesis. 1967. 226p. University Microfilms Order Number 67-10,935, price in microfilm $3.00, in Xerography $10.35.

The aim of the study was to determine whether, in the verbal interaction in a group of nine adults in adult education, a relationship could be shown between members' ego-stage profiles and their patterns of participation. Ego-stage profiles were constructed of basic ego identity concerns using Erikson's conception of psychological development. The hypothesis asserted that congruence or noncongruence between individual and group ego-stage profiles would be systematically reflected in behavior patterns categorized in terms of work and emotion. Patterns of verbal interaction were derived from categories of interaction data in the form of six emotions and four levels of work. Tape recordings of interaction provided data; the utterances were then rated for work levels and emotionality. Twelve tests yielded measures of association which were statistically insignificant, but the feasibility of studying the impact of ego identity concerns on individual behavior was demonstrated.

44. THE COURSE OF HUMAN LIFE AS A PSYCHOLOGICAL PROBLEM. Buehler, Charlotte. In Human Development; v11 n3 p184-200. 1968.

Human life is seen as a process characterized by an intentionality, generated in the care-self system. The phases are: preparing and building up self-determination, setting life goals experimentally and programmatically, and assessing success and failure.

45. TRAINING AS A CHANGE AGENT: A CONSTRUCTIVE EVALUATION. Belasco, James Allan. Cornell University. Ph.D.Thesis. 1967. 458p. University Microfilms Order Number 67-8755, price in microfilm $5.85, in Xerography $20.70.

A series of six two-hour seminars in handling problem employees was given to front line non-academic university supervisors. The Solomen Four Group Evaluation Design and questionnaires were used. Criteria changes were small in relation to training alone, but some sharp changes were associated with the completion of the questionnaire alone. More change was produced when training was preceded by questionnaire completion. Research interviewing made a strong training impact on supervisory morale, self concept, and identification with the organization. Analysis of all tests and measures showed that individuals most likely to change after training had, in descending order of predictive potency: high tolerance of ambiguity, high self-esteem, high authoritarianism, high intelligence, female sex, younger age, and less experience. Role expectations were the single best predictor of change.

46. PERSONALITY CHARACTERISTICS OF VERY BRIGHT ADULTS. Southern, Mara L. and Plant, Walter T. 8p. In Journal of Social Psychology; v75 June 1968.

Personality characteristics as measured by the Study of Values (AVL) and five scales from the California Psychological Inventory (CPI) were obtained for 72 members of Mensa, an international group of persons who earned a scored at or above the 98th percentile on a standardized intelligence test designed for adults. Very bright adults are theoretically, aesthetically, and independently oriented and relatively impulsive and uninhibited.

47. SOME ADULT ATTITUDES AFFECTING LEARNING; POWERLESSNESS, CONFLICTING NEEDS AND ROLE TRANSITION. Zahn, Jane. In Adult Education v19 n2 p91-7 W 1969.

Several studies are reviewed illustrating how adult attitudes affect learning and motivation.

48. MMPI PROFILES AS A FUNCTION OF CHRONOLOGICAL AGE. Thumin, Fred J. 4p. In Journal of Psychological Reports; v22 p479-82 1968.

MMPI and Otis mental ability scores were studied as a function of chronological age among 176 job applicants. Subjects were divided into four groups, with mean ages of 24.8, 31.4, 37.7, and 45.1 years, and the groups were relatively well matched in terms of formal education. Statistical analysis revealed that there were no significant differences among the scores made by the various age groups on any of the 13 basic scales of the MMPI or on the Otis.

49. INFORMATION SEEKING, OPINION LEADERSHIP, AND SENSE OF POWERLESSNESS FOR DIFFERENT ISSUES. White, Shirley A. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-12, 1968) 1968. 6p. EDRS Order Number ED 017 865, price in microfiche $0.25, in hard copy $0.40.

A study was made in Nebraska in 1965 to examine the relationship of four independent variables--opinion leadership, interest, gregariousness, and sense of powerlessness--to the extent of information seeking and the ratio of interpersonal to mediated sources.

50. A PROGRESS REPORT ON THE DEVELOPMENT OF A TEST OF CURIOSITY, Day, H. I. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). February 1969. 22p. EDRS Order Number ED 026 610, price in microfiche $0.25, in hard copy $1.20.

A test of curiosity is being constructed for a population of unselected adults. The test of specific curiosity under construction aims to identify the individual who reacts with positive affect toward situations high in novelty and complexity and who tends to approach them with the purpose of exploring the stimulation, reducing uncertainty, and gaining information. Specific curiosity was conceptualized as a three-faced cube; face 1 is the nature of stimulation (complexity, novelty, ambiguity); face 2 is the nature of the response (observation, questioning, thinking); and face 3 is interests (outdoors, mechanical, computation, scientific, persuasive, artistic, literary, musical, social service, and clerical).

51. STATUS AND CONFORMING JUDGMENT. Long, Huey B. 8p. In Adult Education v18 n4 p239-46 Summer 1968.

Thirty-four employees of the Florida Forest Service participated in a study to determine if conforming judgment tendencies of an employee were related to his employment status. Asch's vertical line test was presented to each employee twice to measure conformity which included-- (1) a paper and pencil silent response, and (2) an oral response in the presence of three subordinate or superior status employees. Results imply that lower status employees conform with opinions of higher status employees, and that status is more important than other variables such as age and years of service.

52. ANOMIA AND COMMUNICATION BEHAVIOR: THE RELATIONSHIP BETWEEN ANOMIA AND UTILIZATION OF THREE PUBLIC BUREAUCRACIES. Marsh, C. Paul, and others. In Rural Sociology v32 n4 p435-45 December 1967.

Since highly anomic individuals are uncertain as to what behavior is appropriate, they are probably less likely to use public bureaucracies. A negative association was found between anomia scores and extent of contact with the Agricultural Extension Service and between anomia and knowledge of area vocational schools. The relationships were in the hypothesized direction regardless of educational level, though the degree of association was quite low in some categories. However, the data did not support the hypothesis of a negative relationship between anomia and contact with the Employment Security Commission. Presumably, the most anomic individuals are most often unemployed and thus more often require the assistance of the employment service in filing for unemployment benefits and in locating employment. This greater need may offset any greater tendency for more highly anomic persons to avoid contact.

53. FEAR OF FAILURE AND INDICES OF LEADERSHIP UTILIZED IN THE TRAINING OF ROTC CADETS. Teevan, Richard C. and Dapra, Richard A. Bucknell University, Lewisburg, Pennsylvania. 1968. 18p. Clearinghouse for Federal Scientific and Technical Information, Order Number AD-668-823, price in microfiche $0.65, in hard copy $3.00.

A modified form of the Thematic Apperception Test (TAT) was scored for fear of failure motivation (FF) by the Hostile Press system. A leadership opinion questionnaire, and the subjects' leadership evaluations from ROTC camp were used as indices of leadership traits. Significant negative correlations were found between FF and the variables of Initiative and Structure. FF individuals tended not to structure their own roles or the roles of their subordinates, and did not show the ability to take necessary actions on their own during summer training.

54. SELF-EXPRESSIVE STYLES AMONG ADULTS ENROLLED IN NONCREDIT CONTINUING EDUCATION

COURSES. Griffith, Albert V., 9p. In Counseling Psychology; v14 n6 p514-22 November 1967.

Shaw's theory of self-expressive styles was tested using the Preference Association Survey and 132 subjects from ten noncredit continuing education courses for adults. Of 102 convergent and discriminant predictions, 87 were confirmed. The results are evidence for the construct validity of the self-expressive styles (Interpretive, Promotional, Humanistic, and Technological) and of the theoretical network--reconciliation of contradictions. Comparisons are made between Shaw's self-expressive styles, Spranger's ideal types, and Holland's vocational types. Shaw's theory is a reconciling position with broadly generalizable constructs and emphasis on proaction in the tradition of transactional social behaviorism.

55. WHY ADULTS LEARN; A STUDY OF THE MAJOR REASONS FOR BEGINNING AND CONTINUING A LEARNING PROJECT. Tough, Allen. Ontario Institute for Studies in Education, Toronto. 1968. 65p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 025 688, price in microfiche $0.50, in hard copy $3.35.

In this study of 35 adults, the most important reason for adult learning is the desire to apply knowledge and skill. Commitment to an action goal came first; then the decision to learn certain knowledge and skills as one step toward achieving the action goal. The second largest number of adult learning projects began as a result of puzzlement, curiosity, or a question. Perceptions of what behavior is appropriate or desirable in a given situation were also influential.

56. LEARNING ORIENTATIONS OF ADULTS FOR ENROLLING IN THE PART-TIME B.A. PROGRAM AT THE UNIVERSITY OF GUELPH. Yadao, Fausto, Jr. and Warlow, G. L. Guelph University (Ontario). Ontario Agricultural College. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). September 1968. 9p. EDRS Order Number ED 025 731, price in microfiche $0.25, in hard copy $0.55.

A study was made of the relationship of the relative scores of respondents on each of five learning orientations (learning, desire for sociability, personal goal, societal goal, and need fulfillment) to selected personal characteristics (age, sex, marital and family status, occupation, income, residence location, religious preference), social characteristics (number of organizational memberships, group subjects studied, subjects studied, subjects studied independently, and hours devoted to independent study and to study of group subjects), and levels of achievement motivation. Subjects were adults in the part-time B.A. program at the University of Guelph. Conclusions: (1) age allows some prediction of learning and sociability orientations; (2) occupational status permits a limited prediction of sociability, need fulfillment, and personal goal orientations; (3) religious preference predicts desire for sociability orientation; (4) levels of achievement motivation predict personal goal orientations.

57. MOTIVATIONAL PATTERNS OF A SELECT GROUP OF ADULT EVENING COLLEGE STUDENTS. Dooley, Bobby Joe and White, William F. 2p. In Journal of Educational Research; v62 n2 p65-6 October 1968.

The motivational patterns of 70 adult evening college students were examined with the Motivational Analysis Test (MAT). Of the ten dynamic structures measured by the MAT, only the Mating ERG (normal, heterosexual drive) proved to be a significant variable in the motivational pattern, but Career Sentiment was observed to be a strong motive in the evening student.

58. ADULT EDUCATION, GENERAL PERSONAL ORIENTATIONS AND COMMUNITY INVOLVEMENT: A CROSS-NATIONAL RESEARCH PROJECT. Agger, Robert E. and others. Institute of comparative Experimental Research on Behavioral Systems, University of Oregon. 1969. 45p.

Project ATE (Attitudes Towards Education) is designed to assess how, to what extent, and in what areas of community public affairs people become involved --in England, Czechoslovakia, Yugoslavia, and the United States. In this first phase, the focus was on correlating adult education with general personal orientations and community involvement in the United States, Czechoslovakia, and the Yugoslav republics of Bosnia and Slovenia. The principal findings were: (1) personal variables of modernism, creativity, tolerance, and social competence were all associated with discussion of local affairs in the Czech and American but not in either of the Yugoslav samples; (2) adult education participation was associated with discussion of local affairs in some, if not all, formal education subgroups in the four samples.

See also: 1300 Participation Patterns; 28 anxiety and perception by age; 31 follow up of Terman gifted group; 36 field independence in engineers; 38 abstracts on adult learning characteristics; 62 challenging and supporting instructions in older persons; 63 achievement needs in young and old; 66 withdrawing tendencies and participation of high and low educational attainment persons; 73 prediction of achievement in extension students; 81 psychological needs of manpower trainees; 85 attitudes about public school adult education; 86 motivations and incentive in basic combat training; 130 methods preferences of rural adults; 158 neuroticism and acceptance of change in mental hospital attendants; 179 effect of sociability on type and rate of interaction in small groups; 233 personality of 4-H leaders; 240 ethical values of young adults; 242 attitudes of men in pre-retirement years; 248 work attitudes and retirement satisfaction; 252 conservatism in university students over 65; 272 attitudes and participation of Ojibway Indians; 277 alienation in adult basic education students; 319 attitudes toward continuing education in engineers; 329 value orientations of clergymen; 392 delayed gratification in industrial training; 395 MMPI and success in business school; 439 measures of confidence in dangerous situations; 463 subjective culture in Americans and Greeks; 270 social character in Spanish American young adults; 369 personality adjustment in vocational students in English further education.

1200 Age Differences

59. AGE AND VERBAL CONDITIONING. Jawanda, J. S. In Psychological Reports; v22 p815-6 1968.

An experiment studied conditioning of verbal behavior across age and sex through application of Taffel's technique of sentence completion. Best conditioning was observed for ages 21-25 and the poorest for ages 56-60, with moderate learning at ages 36-40. Sex was not significant.

60. INFORMATIVE FEEDBACK CONDITIONS AND VERBAL-DISCRIMINATION LEARNING IN ELDERLY SUBJECTS. Kausler, Donald H. and Lair, Charles V. 2p. In Psychonomic Science; v10 n6 p193-4 February 25, 1968.

Verbal-discrimination learning was investigated in elderly subjects under three different informative feedback conditions: Right-Wrong (RW), Right-Nothing (RN), and Wrong-Nothing (WN). In contrast to studies with younger subjects, Group WN displayed a slower rate of acquisition than Groups RW and RN, with the latter two groups being comparable. A successive probability analysis indicated that

the slower rate under WN resulted from a perseveration of incorrect selections.

61. EFFECTS OF CHALLENGING AND SUPPORTIVE INSTRUCTIONS ON VERBAL LEARNING IN OLDER PERSONS. Ross, Edith. Columbia University. Ph.D.Thesis. 1967. 99p. University Microfilms Order Number 67-14,087, price in microfilm $3.00, in Xerography $3.00.

Men between 18 and 26 years of age and in the 65-75 year range, matched for verbal ability and socioeconomic status, were given paired associate learning tasks differing in difficulty under neutral, supportive and challenging instructions. Older persons revealed a greater performance decrement on the more difficult tasks than did the younger group; they did least well on the acquisition phase of learning under challenging instructions and best under the supportive treatment. No differential effects of instructions on relearning was found. The difference between young and old in number of trials needed to master the material under the supportive condition was significantly smaller than under the challenging one. The effects of feelings of inadequacy aroused by the ego-involving instructions on the difficult task were discussed in relation to their interference with the performance of the older persons.

62. EFFECTS OF CHALLENGING AND SUPPORTIVE INSTRUCTIONS ON VERBAL LEARNING IN OLDER PERSONS. Ross, Edith. In Journal of Educational Psychology; v59 n4 p261-6 August 1968.

63. THE EFFECTS OF WORD FREQUENCY, NEED FOR ACHIEVEMENT, AND INSTRUCTIONAL SETS UPON WORD RECOGNITION THRESHOLDS OF YOUNG AND OLD SUBJECTS. Riegel, Ruth M. and Riegel, Klaus F. Michigan University, Ann Arbor. Center for Human Growth and Development. 15 January 1968. 15p. EDRS Order Number ED 023 075, price in microfiche $0.25, in hard copy $0.85.

Young (almost 16) and old (average age 70) subjects were assigned to the control of one or two experiemtnal groups on the basis of age, sex, vocabulary, and need for achievement scores. All participated in a test session and two experimental sessions. Results indicate that: (1) Items that have been often experienced and are represented in the storage system of a subject are recognized faster than items that have been experienced less often. (2) For subjects with large accumulated repertoires, the effects of experience with new items will be less marked than for subjects with smaller repertoires. Their recognition thresholds for such new items are higher than for young subjects. (3) There seem to be age differences in long term need states as measured by the need for achievement test. Old subjects seem to rearrange items at a lower speed than young subjects and consequently have lower achievement test scores. (4) Need-arousing instructions hinder the performance of old subjects, but improve the performance of young ones. Because of their large storage, old subjects seem to become confused rather than being supported by this influence.

64. EFFECT OF TASK COMPLEXITY AND STIMULUS DURATION ON PERCEPTUAL-MOTOR PERFORMANCE OF TWO DISPARATE AGE GROUPS. Tolin, P. and Simon, J. R. 8p. In Ergonomics; v11 n3 p283-90 May 1968.

This study was concerned with two task dimensions, complexity and stimulus duration. Groups aged 18 to 30 and 66 to 87 made an unguided movement at the onset of one stimulus light in a four-light display. Task complexity was varied by altering the number of response alternatives (one or two) while holding the display constant. Two stimulus durations were used. Old subjects reacted 30% slower and moved 76% slower than young. Both reaction time and movement time were slower for the complex task than for the simple. The difference between simple and complex movement time was significantly greater for old subjects than for young.

See also; 1120 Mental, Perceptual Abilities: 4635 Education of Older Adults; 4655 Education of Women; 44 course of human life as a psychological problem; 48 MMPI profiles as function of age; 153 programmed instruction with young and old adults; 279 age and Ohio Literacy Test.

1300 Participation Patterns of Adults

65. ADULT LEARNING IN RELATION TO PRIOR ADULT EDUCATION PARTICIPATION. Sjogren, Douglas and others. In Adult Education; v19 n1 p3-10 Fall 1968.

Adult subjects participated in two learning experiments in which prior participation in an educational activity was an independent variable. The findings suggested that recency of participation is related to higher learning performance. The advantage of the recent participant was interpreted to be a function of the recent participant's broader background knowledge and his "knowing how to learn".

66. DIFFERENTIAL PARTICIPATION PATTERNS OF ADULTS OF LOW AND HIGH EDUCATIONAL ATTAINMENT. Douglah, Mohammad and Moss, Gwenna. 13p. In Adult Education; v18 n4 p247-59 Summer 1968.

The influence of positional and psychological factors on the adult education participation of 274 adults of low educational attainment (less than 12 years) and high educational attainment (more than 12 years) were studied. Participation among adults of low education was related to age, employment status, income, family status, and withdrawing tendencies. Only the personality trait of social skills was significantly related to participation among 128 adults of high education. It was concluded that participation within high and low educational levels cannot be accounted for by a common set of factors.

67. AN ANALYSIS OF SELECTED CHARACTERISTICS AND NEEDS OF ADULT UNDERGRADUATE STUDENTS ATTENDING MICHIGAN STATE UNIVERSITY, FALL TERM, 1966. Erickson, Mildred Brinkmeier. Michigan State University. Ph.D.Thesis. 1968. 233p. University Microfilms Order No. 68-17,078, price in microfilm $3.05, in Xerography $10.60.

Information about the characteristics and perceived needs of adult undergraduates, especially those at Michigan State University. Findings showed that there were more males returning for undergraduate education; the females were older; more of the females were married, widowed, or divorced; the adults were usually satisfied with their lives and jobs; they tended to come from small population areas and non-college parental backgrounds; their spouses tended to have some college education, but more male spouses had done graduate work; they tended to come from middle class backgrounds. Some needs emphasized were: financial aid, curricular and academic improvement, special adult facilities, and improvement in housing, counseling, enrollment, and registration.

68. A SURVEY OF STUDENT ATTITUDES. Collie, Anne and Davis, Vivienne. 10p. In Adult Education; v41 n1 p139-47 September 1968.

Questionnaires distributed to adult participants in five education centers within an eight mile radius of Reading, England, collected information on student characteristics, transportation, classes, motivation for attendance, and attitudes toward general organization and administration.

See also: 49 powerlessness related to information seeking in Nebraska adults; 71 past adult education experience and other factors; 73 psychological, biographical measures for prediction of achievement in extension students; 84 night

school dropouts in Toronto; 122 educational interests in Marion County, Iowa; 123 interests of adults in five Michigan Counties; 156 university correspondence study; 241 rural young adults; 272 Ojibway Indians; 355 long-term leadership program; 445 leisure preferences of household heads in Albany County, New York; 446 community cultural arts program.

1500 PROGRAM PLANNING AND ADMINISTRATION

1510 Assessing Educational Needs

See: 4600 EDUCATION OF PARTICULAR GROUPS; 5200 PROGRAM AREAS; 5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; 6200 MANAGEMENT, SUPERVISORY DEVELOPMENT; 6500 OCCUPATIONAL TRAINING: 15, 223, 224, 234 educational needs of extension, hospital and other adult educators; 271 employment needs of Wisconsin Indians; 280 reading diagnosis; 364, 365, 405, 421, 423 training needs in Goshen County, Wyoming, in Illinois junior colleges, in school custodial programs, and in electronics training in Iowa industry and the armed forces.

1550 Determination, Refinement of Objectives

69. A PLAN FOR IMPLEMENTING A PROGRAM OF CONTINUING ADULT EDUCATIONAL SERVICES. Dakin, William Robert. Arizona State University. Ed.D.Thesis. 1967. 342p. University Microfilms, Order Number 67-10,862, price in microfilm $4.40, in Xerography $15.55.

From analysis of the literature and the opinions of experts in adult education, 14 basic steps for implementing a program of noncredit, informal, continuing adult educational services were derived.

See also: 132 systems approach to learning; 189 civilian defense community simulation; 253 administrative problems in university programs for women; 301 model for Cooperative Extension program planning; 316 systems approach to updating professionals; 449, 480 investigation of concepts in religious education; 465 recommendations on program development at Birkbeck College; 367 organization of vocational education in Birmingham schools; 423 forecasting electronic training needs.

1600 Recruitment of Participants

70. SOME FACTORS IN WORKERS' DECISIONS TO FOREGO RETRAINING, PROGRESS REPORT OF A STUDY IN METROPOLITAN TORONTO. Abbey, David S. February 1968. 13p. Paper presented at the National Seminar on Adult Education Research (Chigago, February 11-13, 1968). EDRS Order Number ED 017 813, price in microfiche $0.25, in hard copy $.75.

Two groups of workers were interviewed--27 applicants to Canadian Manpower Centres who had rejected retraining ("refuser" sample), and 46 who had accepted but failed to appear ("no-show" sample). Critical factors for refusing were the length of time before training and lack of money. Of the "no-show" sample, few referred to desire for higher income, most saw the additional education as assurance of regular or more desirable employment, about half were unwilling to move from the city for a job, and none referred to desire to acquire skills in demand by employers.

71. PARTICIPATION IN ADULT EDUCATION AGENCIES AND PERSONAL INFLUENCE. Booth, Alan and Knox, Alan B. 1968. 20p. EDRS Order Number ED 023 984, price in microfiche $.25, in hard copy $1.10.

The hypothesis that persons who have limited experience in adult education programs report personal influence in connection with decisions to participate more often than persons who have more extensive experience was not clearly supported. Participants were of higher education than non-participants; married, belonging to several voluntary organizations, middle-aged, female, and residentially mobile. Sources of the influence were: face-to-face (40%); mass communicated source (29%). unknown (31%). However, a total of 74% of all the respondents had face-to-face contact.

See also: 97 recruitment, admission policies and practices in university evening colleges; 459 characteristics of participants in low-income parent program.

1650 Selection, Prediction of Success

72. EVALUATING ADULTS FOR FURTHER STUDY. Allyn, Nathaniel C. 1969. 4p. Paper presented at the National Seminar on Adult Research (Toronto, February 9-11, 1969). EDRS Order Number ED 026 612, price in microfiche $0.25, in hard copy $0.30.

The College-Level Examination Program (CLEP) provides examinations to evaluate the educational background of adults wishing to pursue college level studies. Five multiple-choice tests assess general or liberal arts background as compared to two years of undergraduate education. The Subject Examinations are tied more closely to specific fields or subjects and include an optional essay portion. Both series are available through an institutional administration or one of 57 CLEP centers. Colleges are using the examination for admission, placement, and other purposes. Nearly 400 colleges and many other institutions and agencies have indicated that they will award credit on the basis of CLEP testing.

73. THE PREDICTION OF COLLEGE LEVEL ACADEMIC ACHIEVEMENT IN ADULT EXTENSION STUDENTS. Flahery, M. Josephine. Toronto University (Ontario). Ph.D.Thesis. 1968. 266p. University Microfilms.

This study investigated cognitive and noncognitive factors in the variance among 43 psychological and biographical measures on 296 adult university extension students, and compared the factors as predictors of academic achievement. Verbal and nonverbal intelligence, study habits and attitudes, persistance, learning orientation, age, sex, years since leaving school, number of college subjects taken to date, and hours of study per week were among the variables considered. These were among the conclusions: (1) adults can be classified by learning orientations, especially need for acceptance and for relief from boredom; (2) intellectual and educational ability was the best predictor of science and social science grades and overall averages; (3) study habits and attitudes were the best predictors of grades in humanities; (4) societal goal orientation was the best predictor of mathematics grades; (5) age was a predictor of science and mathematics grades for mixed groups and for males. (6) the predictive validity of some factors differed greatly by sex.

74. THE ACADEMIC PERFORMANCE OF PART-TIME EVENING DIVISION STUDENTS IN A FULL-TIME PROGRAM OF STUDY. Murphy, James T. 26p. EDRS Order Number ED 016 446, price in microfiche $0.25, in hard copy $1.40.

Nassau College permitted students who were initially inadmissable for full-time status to transfer from a part-time, probationary status after completion of three evening courses with a grade point average of at least 2.3. To determine the effectiveness of this policy, records of 84 such transfer students were

studied. Of these students, one-half maintained a GPA of 2.0 or higher, and there was a mean decrease of .59 of the 25 withdrawals from the day program prior to completion. Half were attributable to academic difficulty, primarily in liberal arts, sciences, and mathematics. Academic difficulty, as shown by failure to earn a 2.0 average, was greatest among business administration, social science and elementary education majors. The distribution of grade point averages indicated that the minimum average for transfer to the day program should be raised to 2.5 for at least 12 units of work.

75. PROCEEDINGS OF THE ANNUAL CONFERENCE OF THE MILITARY TESTING ASSOCIATION (10th, SAN ANTONIO, TEXAS, September 16-20, 1968). United States Air Force Human Resources Laboratory, Lackland AFB, Texas. October 1968. 287p. Clearinghouse for Federal Scientific and Technical Information, Order Number AD-679-145, price in microfiche $.65, in hard copy $3.00.

This conference on military testing centered on (1) testing of Project 100,000 personnel (potential rejectees accepted under new standards); and (2) papers dealing with specific aptitude and proficiency tests, a comparison of marginal and control Naval personnel on biographical data and recruit performance, the military services high school testing program, the selection and training of air crews and air wing technicians, an officer motivation study, psychometric and feedback standards in the Extension Courses Institute learning system, behavior change in Officer Candidate School, factor scores for MOS code 67N40 Helicopter repairmen, job analysis, data banks and similar data collection systems, a computer system for the weighing of alternative test and questionnaire items, and other aspects of military testing and test construction.

76. A GUIDE TO THE EVALUATION OF EDUCATIONAL EXPERIENCES IN THE ARMED FORCES; FORMAL SERVICE SCHOOL COURSES, CREDIT AND ADVANCED STANDING BY EXAMINATION. Turner, Cornelius P., Ed. American Council on Education, Wasnington, D.C. 1968. 523p. Available from American Council on Education, 1785 Massachusetts Avenue, N. W., Washington, D.C. 20036.

This guide (1) lists residential course offerings by the Air Force, Army, Coast Guard, Marine Corps, Navy and Department of Defense, and (2) describes General Educational Development (GED) testing program and the College-Level Examination Program (CLEP). Guidelines are furnished on credit and advance standing by examination, the administration of GED and CLEP tests, and the evaluation of scores, together with actual CLEP scores (1965-66) by United States Armed Forces Institute candidates.

77. OCCUPATIONAL VALIDITY OF THE GENERAL APTITUDE TEST BATTERY. Bemis, Stephen E. 5p. In Journal of Applied Psychology; v52 n3 p240-4 1968.

Twenty years of occupational validation on the General Aptitude Test Battery (GATB) are summarized in terms of average validity with (a) job proficiency and training criteria and (b) concurrent and longitudinal studies.

78. AIRMAN QUALIFYING EXAMINATION-66 ADMINISTERED AS A CONFIDENCE TEST. Shuford-Massengill Corp., Lexington, Mass. May 1968. 51p. Clearinghouse for Federal Scientific and Technical Information, Order Number AD-677-210, price in microfiche $.65, in hard copy $3.00.

Airman Qualifying Examination-66 (AQE-66) was readministered to basic airmen as a valid confidence test (a test in which the effects of guessing are minimized). Airmen understood the method of confidence testing and yielded data over and above that available from choice testing. There is no evidence that confidence testing disrupted the test-taking process. Wide individual differences were observed in airmen's ability to evaluate information. Observed patterns indicate that airmen would be guessing on about 1/4 of the items if AQE-66 had been

Administered as a choice test. Confidence test administration increased reliability of AQE-66.

79. AN ANALYSIS OF THE NAVY VOCATIONAL INTEREST INVENTORY AS A PREDICTOR OF SCHOOL PERFORMANCE AND RATING ASSIGNMENT. Abrahams, Norman M. and others. U.S. Naval Personnel Research Activity, San Diego, California. October 1968. 23p. Clearinghouse for Federal Scientific and Technical Information, Order Number AD-681-044, price in microfiche $.65, in hard copy $3.00.

To evaluate noncognitive tests in classifying recruits, the Navy Vocational Interest Inventory (NVII) was validated against "A" school achievement and analyzed for its ability to differentiate men in different ratings. Analysis of the data indicated the NVII scales to be effective in differentiating men in various schools, indicating its usefulness as a classification instrument. The scales also contributed significantly to the prediction of "A" school achievement.

80. STRATEGIES FOR PREDICTING ADJUSTMENT OF AFQT CATEGORY IV NAVY AND MARINE CORPS. PERSONNEL. Plag, John A. and others. Navy Medical Neuropsychiatric Research Unit, San Diego, California. October 1968. 14p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-681-012, price in microfiche $0.65, in hard copy $3.00.

Three points summarize the studies for Category IV (low ability) Marines and sailors. First, Armed Forces Qualifying Test score is a valid predictor of an enlistee's performance. Category IV enlistees are inferior to average enlistees on a variety of measures. Second, many Category IV enlistees can render effective military service. Seventy-three percent of Marines and 65% of sailors were found to be effective. Third, civilian educational achievement was related to military effectiveness and the most important predictor studied.

81. PSYCHOLOGICAL NEEDS AND VOCATIONAL MATURITY OF MANPOWER TRAINEES. Bartlett, Willis Edward. Ohio State University. Ph.D.Thesis. 1967. 149p. University Microfilms Order Number 68-2950, price in microfilm $3.00, in Xerography $7.00.

A study was made of psychological needs and vocational maturity of 158 trainees enrolled in nine skill areas in a Manpower Development and Training Act center. Trainees were given the Vocational Maturity Scale (VM) and 15 scales of the Adjective Check List during the first week of training. Records were obtained of age, last school grade completed, congruence of occupational choice with skill area training, and whether the individual continued training after the first month. The VM scale seems related to achievement and dominance needs; vocational maturity differs among various skill areas; in view of the great overlapping of psychological needs scales from one skill area to another, a trainee's needs could apparently be met through his being in almost any skill area; the VM scale is apparently related to the last grade completed in school; trainees with psychological characteristics compatible with deference to classroom activities continue after the first month, while other trainees do not.

82. DEVELOPMENT AND STANDARDIZATION OF AIRMAN QUALIFYING EXAMINATION 66. Vitola, Bart M. and Madden, Howard L. Personnel Res. Lab., Lackland Air Force Base, Texas. August 1967. 24p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-661-996, price in microfiche $0.65, in hard copy $3.00.

This report describes the standardization of the 1966 Airman Qualifying Examination (AQE). Descriptive data and statistical characteristics of AQE items

and subtests are presented, as well as intercorrelations among Project TALENT tests and AQE variables. The report was designed as a reference source to be used in Air Force recruiting and to provide information to counselors in the high school testing program.

83. AN ANALYSIS OF CERTAIN METHODS FOR INCREASING THE VALIDITY OF THE AIRMAN QUALIFYING EXAMINATION FOR THE CLASSIFICATION OF BASIC AIRMEN. Tupes, Ernest C. and others. Personnel Res. Lab., Lackland Air Force Base, Texas. August 1967. 21p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-661-997, price in microfiche $0.65, in hard copy $3.00.

Assignment of enlistees is based on four aptitude composites, each derived by a summation of scores on subtests of the Airman Qualifying Examination. The present report describes a study designed to determine the increase in validity for prediction of performance in technical training courses which might be obtained by the use of (1) aptitude composites derived from optimally weighted subtests along with additional information, (2) separate aptitude composites derived for each course, (3) separate composites derived for enlistees from different geographical areas, or (4) various combinations. Data from 46,000 enlistees and 88 technical courses were analyzed. Both the addition of information to the aptitude composites and the use of separate composites for each technical course significantly increase the validity of the selection system.

See also: 50 test of curiosity; 156 success in university correspondence study; 274 vocational assessment of retarded; 278, 282 predicting success in inner city literacy programs; 279 Ohio Literacy Test; 382, 387, 388 success in MDTA vocational training; 427 performance in avionics fundamentals course; 429 trainability tests for older adults; 439 measures of confidence in dangerous situations.

1700 Retention of Participants

84. A STUDY OF NIGHT SCHOOL DROP-OUTS, A SCHEDULE 10 PROJECT. Alam, Mubarka Wright, E.N. Toronto Board of Education, Ontario. March 1968. 111p. EDRS Order Number ED 018 769, price in microfiche $0.50, in hard copy $5.65.

A study of night school stayins and dropouts used a randomly selected sample from Toronto evening classes. Differences between stayins and dropouts were not well enough defined to be used in selection procedures. The dropout was likely to be younger, unmarried or widowed, live alone or with parents, in clerical occupations, and in language, commercial, and clerical courses. The largest differences seemed to occur in matters involving the respondent personally--whether he felt at home in the class, whether he got to know many students, and whether he found the course interesting or useful. There was a marked tendency for stayins' friends to be stayins and dropouts' friends to be dropouts.

85. DIFFERENCES IN SOME INITIAL ATTITUDES OF STUDENTS WHO COMPLETE AND STUDENTS WHO DROP OUT IN THE WELLESLEY, MASSACHUSETTS ADULT EDUCATION PROGRAM. FINAL REPORT. Hurkamp, Rosemary C. Boston University. United States Office of Education, Washington, D.C., Bureau of Research. 10 January 1968. 25p. EDRS Order Number ED 024 786, price in microfiche $0.25, in hard copy $1.35.

An assumption underlying this study is that the attitudes of students towards certain attitude objects, for example, age, number of children, size of class, location of school, etc., might be more important than the factual objects themselves. Data were gathered by administering a questionnaire including attitude items and factual data items to 189 dropouts from the Wellesley, Massachusetts

Adult Education Program. The primary conclusion was that there are differences in some initial attitudes of students who complete and of students who drop out of adult education programs, and that these differences are significant.

86. PRELIMINARY STUDY OF MOTIVATION AND INCENTIVES IN BASIC COMBAT TRAINING. Bialek, Hilton and McNeil, Michael. George Washington University. HumRRO. 1968. 18p. Clearinghouse for Federal Scientific and Technical Information. Order Number AD-670-744, price in microfiche $0.65, in hard copy $3.00.

To measure subjective reward values, 43 possible incentives were rated by trainees on a seven-point scale, from most to least attractive. Nineteen incentives were reliable and of low variability. The ten most attractive incentives were categorized into three classes: Recognition (Peer and/or Social), Material Reward, or Autonomy (Freedom). The ten specific incentives and the categories of Recognition and Autonomy may be varied to measure the effectiveness of variations in Basic Combat Training.

87. CHANGES IN SELF-REPORTED SYMPTOMATOLOGY DURING RECRUIT TRAINING. Clum, George A. and others. United States Navy Medical Neuropsychiatric Research Unit, San Diego, California. Published in PROCEEDINGS OF THE APA ANNUAL CONVENTION (76th), 1968. 5p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-679-748, price in microfiche $0.65, in hard copy $3.00.

This study analyzed changes in physical and emotional symptomatology during a Marine recruit training period. Scores on the Cornell Medical Index were high at the beginning of training but declined steadily.. This decline in symptoms was not due to repeated testing but reflected an actual decrease in subjective distress. Older, more intelligent recruits with high educational level and positive attitudes toward the Marine Corps were more stable on symptoms acknowledged.

88. POWER AND AFFECTIVITY IN THE SOCIALIZATION OF AIR FORCE ROTC CADETS. Potter, Helen R. New Mexico University. Report on "Influence of a Campus Environment on Student Commitment to a Paramilitary Organization". 1968. 41p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-676-285, price in microfiche $0.65, in hard copy $3.00.

This study examined differences in the extent to which ROTC cadets become committed to a favorable attitude toward service in the Air Force and to an active role in ROTC. Commitment was postulated to result from anticipatory socialization whereby cadets can adopt behavior suiting the role of an officer. It was hypothesized that adoption depends on power (a cadet's susceptibility to ROTC influence during his first semester) and on affectivity (initial favorable attitude toward the Air Force). Power affected commitment more than affectivity did. Cadets initially scoring high on power were more likely to remain in ROTC, achieve high rank, increase social involvement, and increase in their affectivity during four years.

See also: 323 persistence of nurses in basic training; 380 attrition and success in inner city job training; 392 preference for delayed gratification related to industrial training program.

1750 Counseling, Guidance

89. A SURVEY OF EVENING COLLEGE COUNSELING SERVICES IN CALIFORNIA JUNIOR COLLEGES. Ryska, John W. Fresno City College, California. January 1968. 15p. EDRS Order Number ED 020 736, price in microfiche $0.25, in hard copy $0.85.

Problems cited by respondents included inadequate opportunities for counseling and lack of adequate records and background information on students. Most of the students were highly vocation oriented with greater family, job and financial pressures than those experienced by day students. The following program characteristics were identified - (1) 40.5 percent of the institutions served medium city-suburban areas, (2) 35.5 percent had evening enrollments greater than day enrollments, (3) 95 percent permitted counselors to teach evening classes, (4) 97 percent made counseling available for evening students, (5) 67 percent paid their counselors on an hourly basis, with a mean salary of $7.75, and (6) 46 percent made individual testing services available for evening students.

90. AN EVALUATION OF THE GUIDANCE PROGRAM IN THE LOS ANGELES CITY ADULT SCHOOLS. Stewart, Robert Miller. California University, Los Angeles. Ed.D.Thesis. 1967. 177p. University Microfilms Order Number 67-9,035, price in microfilm $3.00, in Xerography $8.20.

This study evaluated the guidance program of the Los Angeles Adult Schools to determine if services are meeting clientele needs. Findings included the predominance of educational over vocational counseling; limited information services; inadequate data on students' personal, social, and mental status; little attention to student vocational interests, aptitudes, preferences, personality, out-of-school activities, or work experience; personnel shortages; lack of suitable training and experience among about half of the guidance counselors; and poor provision for followup services. Recommendations dealt with testing, vocational guidance, and the need for guidance-minded faculty and administrators.

91. THE EFFECTS OF ON-THE-JOB COUNSELING ON EMPLOYERS' RATING AND JOB SATISFACTION OF PERSONS TRAINED IN SELECTED OKLAHOMA MDTA CLASSES DURING 1967-1968. FINAL REPORT. Hoerner, Harry J. and Stevenson, William W. Oklahoma State University. September 1968. 136p. EDRS Order Number ED 023 930, price in microfiche $0.75, in hard copy $6.90.

The purpose of this study was to measure possible effects of post-manpower training counseling of an occupational nature upon perception and behavior of subjects from eight selected Oklahoma Manpower Development and Training Act classes. Counseling did not bring about a higher job satisfaction level when means of their test scores were tested against those not counseled. Similarly, the employee performance of counseled subjects was not significantly different. However, the counseling treatment was found to affect the subjects obtaining bona fide and legitimate jobs, the number of weeks it required subjects to get such jobs, and the percent of time subjects held such jobs.

92. INFORMAL HELPING RELATIONSHIPS AMONG ADULTS. Macdonald, Mairi St. John. 1969. 4p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 025 736, price in microfiche $0.25, in hard copy $0.30.

An exploratory study examined the informal helping relationship between adults seeking assistance with problems and the persons they selected as helpers.

93. THE MILITARY AS A TRAINER: A STUDY OF PROBLEMS IN MEASURING CROSSOVER. Weinstein, Paul A. and Jurkowitz, Eugene L. February 1968. 11p. Available from Industrial Relations Research Association, Social Science Building, Madison, Wisconsin 53706 ($5.00). In Proceedings of the Twentieth Annual Winter Meeting, Industrial Relations Research Association, Washington, D.C. December 28-29, 1967.

This study sought to measure the transferable impact of military manpower training by testing two hypotheses: (1) the more alike the occupations the greater probability that skill would be transfered, and (2) investment in human capital in military vocational training fields increased post military individual earnings.

The first hypothesis was rejected and testing of the second yielded two conclusions: (1) the difference between occupational groups and the base group was nil, and (2) within an occupational group, income was positively related to occupational crossover.

See also: 325 re-training of school psychologists; 326 role of women personnel administrators in universities; 358 transferability of military skills; 360 trends in vocational guidance revealed in six years of CIRF abstracts.

1800 Student Aid and Services

94. STUDENT GOVERNMENT; ORGANIZATION AND FUNCTION IN MARRIED-STUDENT HOUSING AREAS OF SELECTED COLLEGES AND UNIVERSITIES. Tempel, Norman F. Wyoming University. Ed.D.Thesis. 1967. 181p.

See also: 4 history of GI Bill; 277 stipends in adult basic education.

1850 Administrative Policies and Practices

95. ADMINISTRATIVE PROCESSES IN ADULT EDUCATION, A CRITIQUE OF EXISTING PRINCIPLES AND A METHOD FOR IMPROVING THEIR VALIDITY. Ingham, Roy J. February 1968. 27p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). EDRS Order Number ED 017 814, price in microfiche $0.25, in hard copy $1.45.

Reviews the literature on principles of adult education administration and shows need for research on certain neglected administrative processes, formulating principles about the human relations aspect of administration, and examining more closely the extent to which the principles apply to differing adult education agencies.

96. ADULT EDUCATION IN TRANSITION; A STUDY OF INSTITUTIONAL INSECURITY. Clark, Burton R. 1968. 166p. Available from University of California Press, 223 Fulton Street, Berkeley, California 94720.

This study of educational administration and institutional change was conducted during 1952-53. The general finding was that adult schools have taken on a service character. Programs are highly adaptive to the expressed interests of students and community groups, and the schools are closely related to their clientele. Strong evidence lies in the way classes are initiated, the basis for hiring and firing teachers, the duties of administrators, and the content of administrative doctrines. The effects of the marginal position of adult education, the purposes of adult education since the 1920's and their influence on the adaptive behavior of leadership, and operating pressures that stem from state legislation and student clientele, are the reasons for this service orientation.

97. A SURVEY OF POLICIES AND PRACTICES IN VARIOUS EVENING COLLEGES AND DIVISIONS OF COLLEGES AND UNIVERSITIES IN THE UNITED STATES. Final Report. 1969. 99p. Association of University Evening Colleges, Norman, Oklahoma. Research Committee.

A survey was made of evening program policies and practices at 64 private institutions, 26 state universities, eight state colleges, and nine junior colleges. Aspects considered were admission policies; titles of divisions, schools, or colleges; faculty recruitment and responsibility; scheduling; fees; research;

general policies; and public relations and student recruitment. Findings included the following: most institutions had flexible admission policies enabling adults to take credit courses as special, nondegree, or part time degree students; 51 charged lower fees, and 53 the same fees, for evening students; 66 had 50% or more full time faculty teaching in the evening; full time faculty were generally hired by evening directors or deans or by department chairmen; evening directors or deans generally did the scheduling; 24 institutions reported adult education research projects either completed or in progress; 37 were involved in Upward Bound and other types of innovative programs; students participated at least partly in academic program planning in 65 institutions; 58% of institutions reported adequate support for evening programs; most used newspapers, but few used television, for publicity.

98. EVENING CLASS SCHEDULES OF LARGE COLLEGES AND UNIVERSITIES. Dalby, J. Philip. Cuyahoga Community College, Cleveland, Ohio. October 1967. 28p. EDRS Order Number ED 020 744, price in microfiche $0.25, in hard copy $1.50.

Responses from 310 institutions indicated that (1) 73 percent of the 4-year colleges followed semester calendars, 21 percent followed quarter calendars, 5 percent were on trimesters, and 1 percent used other types of calendars; (2) 84 percent of the 2-year colleges followed the semester plan, 9 percent followed the quarter calendar, and 7 percent the trimester or "other" calendar systems; (3) 62 percent of the 4-year colleges scheduled evening classes once per week, 33 percent twice per week, and 4 percent three times per week.

99. A STUDY IN ORGANIZATIONAL INTERACTION BETWEEN AN EVENING COLLEGE AND ITS PARENT INSTITUTION. FINAL REPORT. Jacobson, Myrtle S. New School for Social Research, New York, New York. January 15, 1968. 44p. EDRS Order Number ED 020 572, price in microfiche $0.25, in hard copy $2.30.

This study analyzes the structural ties and relationships of an educational suborganization (evening degree program) and its parent collegiate institution (Brooklyn College).

100. A SURVEY OF EVENING COLLEGE ADMINISTRATION PRACTICES IN CALIFORNIA JUNIOR COLLEGES. Ryska, John W. Fresno City College, California. February 1968. 18p. EDRS Order Number ED 019 924, price in microfiche $0.25, in hard copy $1.10.

The purpose was to discover differences between day and evening administrative practices. The findings showed the variations in the role of the evening administrator in several areas -- (1) his relation to the trustees, (2) budget planning, (3) faculty hiring, (4) facility planning, (5) counseling policy, (6) class scheduling, (7) faculty payroll processing, (8) salary negotiations, (9) instructional supervision, (10) curriculum coordination, (11) hiring of classified personnel, (12) campus publications, and (13) extra-class activities. Differences were shown, not only between day and evening practices but also among the evening colleges themselves.

See also: 299 policies, administration of University of Illinois Extension, 467 effects of AACSB standards on evening college business programs.

1890 Relations with Governing, Advisory, Clientele Groups

101. AN EXPLORATION OF FACTORS ASSOCIATED WITH NORTH CAROLINA LEGISLATORS' PERCEPTION OF THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE. Smith, George Watson. Duke University, Durham, North Carolina. Ed.D.Thesis. 1967. 252p. University Microfilms Order Number 68-3447, price in microfilm $3.25, in Xerography $11.50.

This study focused on the influence of personal factors on legislators' perceptions of the Agricultural Extension Service. Concepts of county represented, degrees of involvement with Extension, residence, occupation, length of legislative service, and size of farm or business were the independent variables. Findings included the following: (1) each variable was significant for at least two, and as many as ten, of the 42 elements of perception examined; (2) degree of involvement with the Extension Service was the chief variable: (3) next came business or farm size, with seven significant associations, and occupations, with six; (4) length of service and concepts of the type of county or district represented were generally the least important.

102. NOMINATION AND ELECTION PROCEDURES, AND MAKE-UP OF THE 1967 COUNTY UNIVERSITY OF MISSOURI EXTENSION COUNCILS. Martin, John E. Missouri University. April 1968. 40p. EDRS Order Number ED 021 180, price in microfiche $0.25, in hard copy $2.10.

A study of the nomination and election procedures and make-up of County University of Missouri Extension Councils analyzed the methods used and results obtained by Councils. Summaries of the data were made by county size. No real differences were found. Seven methods of holding elections were identified -- mail-in ballot, polls, and public meetings and four variation of these, with most counties using only polls. The cost of holding elections was the usual reason for using some method other than mail. Council members were predominately male, over 40, had completed high school or above, and were in their first term. Four interest groups predominated -- (1) farming and homemaking, (2) 4-H and Home Economics Club organization, (3) business, professional and civic organizations, and (4) schools and other.

103. THE RELATIONSHIP OF COUNTY BOARDS OF SUPERVISORS' KNOWLEDGE OF CERTAIN ASPECTS OF THE COOPERATIVE EXTENSION SERVICE TO FINANCIAL SUPPORT IN EIGHT VIRGINIA COUNTIES. Rich, Nolan Neel. Virginia Polytechnic Institute, Blacksburg. M.S.Thesis. July 1967. 134p. Available from Virginia Polytechnic Institute, Blacksburg, Virginia 24061.

This study focused on Virginia county boards of supervisors, and on certain attributes of individual members, to determine the relationship of these attributes to county financial support for Virginia Cooperative Extension Services. Within one extension district, two groups of four counties each were studied: one with the lowest, and one the highest, level of financial support of extension work. None of the attributes studied significantly related to the level of financial support. There was no significant correlation between supervisors' knowledge of extension purposes and their knowledge of extension fiscal policies.

104. SMALL BUSINESSMEN'S PERCEPTIONS OF UNIVERSITY EXTENSION. Resource Report 4. Douglah, Mohammad A. and Dopp, Arvid D. Wisconsin University. September 1967. 4p. EDRS Order Number ED 026 564, price in microfiche $0.25, in hard copy $0.30.

A survey was made in Wisconsin, of small businessmen's knowledge of university extension. The businessmen appeared most knowledgeable about Extension programs offered through mass media, less about local staff affiliation and relationship to the University. They participated to the greatest extent through the mass media, considered traditional programs important, but also desired programs geared specifically to their own needs. They also tended to have favorable attitudes toward Extension programs, personnel qualifications, and the involvement of the University in problem solving. Community improvement, marketing, and business management were among program areas desired. Moreover, 51% were willing to pay a fee for such programs.

105. A COMPARISON OF THE ATTITUDES OF THE MICHIGAN COOPERATIVE EXTENSION STAFF

TOWARD MARKETING, AGRICULTURAL POLICY, AND FARM ORGANIZATION. Hadley, Herbert Harlan. Michigan State University. Ph.D.Thesis. 1967. 183p. University Microfilms Order Number 68-4144, price in microfilm $3.00, in Xerography $8.40.

Comparisons were made of commercial farmers' and Extension agents' views of the general farm situation; the effects of government price supports on farm prices; the existing market structure and acceptable ways of bargaining for increased farm product prices; and views of the general farm organizations and how they should be organized and run.

See also: 121 community influentials and participation in Cooperative Extension; 305 area development leadership group in Iowa Extension Service.

2200 LEARNING ENVIRONMENTS

2210 Community Education and Development

106. HELPING COMMUNITIES LEARN HOW TO HELP EACH OTHER. Menlo, Allen. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). February 1968. 14p. EDRS Order Number ED 017 812, price in microfiche $0.25, in hard copy $0.80.

A test was made of the theory that the relationships between communities would be more productive as inter-community acceptance, trust, and cooperativeness increased. Teams of leaders from each of 18 suburban communities attended semi-monthly seminars, diagnosed changes needed to gain citizen involvement, and planned strategies for change. Goals were defined as a more adequate flow of information between communities, more opportunities for training, and increased participation of citizens. An inter-community team assumed responsibility for initiating movement toward the regional goals. Citizens with a high level of participation developed more positive perceptions of their own communities and increased their readiness to work with citizens from other communities.

107. LEADERSHIP IN COMMUNITY DEVELOPMENT. Hughes, Robert G. Colorado State University. M.Ed.Thesis. June 1968. 81p. EDRS Order Number ED 023 947, price in microfiche $0.50, in hard copy $4.15.

A study was made to determine client system leadership expectations in individual and group problem situations. A questionnaire was mailed to 190 community leaders selected to attend meetings on social action. Respondents selected the group problem solving approach for individual problems and the key person approach for group problems. Data were also analyzed for age, sex, level of education, occupation, and acquaintance with the Extension staff. It was concluded that client system leadership does not hold the "service" expectation stereotype of Extension workers; rather community leaders challenge the Extension worker to use more group and key person orientation.

108. RESEARCH ON CONTENT, METHODS, AND TECHNIQUES IN EDUCATION FOR DEVELOPMENT. Spaulding, Seth. 16p. In Review of Educational Research; v38 n3 p277-92 June 1968.

Based on data from 84 countries, this review summarizes trends in research on curriculum development, social and cultural influences on children's learning styles, inputs and outputs of education systems, mass media and modern educational technology, effects of literacy programs, and literacy teaching techniques and reading materials. Educational research efforts in emerging nations tend to stress practical means of teaching more students more effectively.

109. TOWARD THE STYLE OF THE COMMUNITY CHANGE EDUCATOR. Franklin, Richard. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). February 1969. 43p. EDRS Order Number 025 721, price in microfiche $0.25, in hard copy $2.25.

Implications of change agents' styles of interaction with client systems are discussed. Five styles are defined: (1) the instructor, who imparts information to clients and interacts only with his agency; (2) the paterfamilias, who exercises personal, paternalistic influence; (3) the advocate, who channels agency influence to the client; (4) the servitor, who simply performs tasks for clients and implements agency decisions; and (5) the community change educator, who interacts effectively with both agency and clients.

110. OUTSTANDING FEATURES OF THE INVENTORY (BAEQ). CONDENSED REPORT. Duval, Louise. Carleton Opinion Research Services, Ltd. (Canada). February 1968. 28p. EDRS Order Number ED 023 957, price in microfiche $0.25, in hard copy $1.50.

This condensed report on Agricultural Research and Development Administration research in Canada summarizes the principal hypotheses regarding socioeconomic change in a pilot region. Examination of attitudes toward change reveals a link between the economic situation, degree of social integration, and resistance to change. Study of cooperatives and of forest unions raises the question of participation by membership in decision making. Comparison of population to leadership types shows the young, dynamic, and personal types of leadership, associated with sociable, informed, and socially integrated populations, as most efficient. Study of family life reveals a gap between private and public life. Study of political and social dependence exposes specialized interests initially crystalized in informal social situations and now supported by more formal means.

111. EDUCATION AND SOCIAL DEVELOPMENT. Adams, Don and Adams, Janet. 21p. In Review of Educational Research; v38 n3 p243-63 June 1968.

A review is presented of research, mainly in developing nations, on linkages between educational systems and broad societal changes in national and social development. The studies deal with generalities of education and development (including national and cross-national aspects) and with the impact of education on social mobility, community development and national integration, migration and urbanization and fertility. Such factors as social background, parent child relationship, rural and urban differences, educational attitudes, and purposes, types and levels of education have been assessed, with widely varying results.

112. AN EVALUATION OF THE RELIABILITY OF THE SELF-STUDY METHOD IN COMMUNITY DEVELOPMENT. Knittel, Robert Edward. Southern Illinois University. Ph.D.Thesis. 1967. 250p. University Microfilms Order Number 67-15,863, price in microfilm $3.25, in Xerography $11.25.

The concept of self study method in community development is discussed and a program conducted in 1956-57 is examined to determine if the self study goals were met. The impact of the self study program was determined from personal interviews and questionnaires completed ten years after the self-study, observations, and reviews of newspapers and materials from the program. It was concluded that the year long study did have some effect on long range activities toward community goals, although immediate results were not readily apparent. Each self study goal is discussed as to the extent it was reached.

113. A TYPOLOGY OF COMMUNITY LEADERSHIP. Preston, James Dene. Mississippi State University, State College. Ph.D.Thesis. 1967. 199p. University Microfilms Order Number 67-9208, price in microfilm $3.00, in Xerography $9.00.

This study evaluated four dimensions of community leadership structures; sought operational measures of each dimension; compared the overlap among three approaches

to identifying community leaders; and constructed a community leadership typology. Highly generalized leaders were broadly involved in at least three interest areas; less generalized leaders were broadly involved in two interest areas; limited scope leaders were less broadly involved. Relatively small groupings of top leaders would have been identified regardless of approach; many leaders would have been identified only by all three methods or some combination of two methods.

114. WHAT DOES THE EYE SEE--THE EAR HEAR? Griessman, B. Eugene. 8p. In Journal of Cooperative Extension; v6 n3 p135-42 Fall 1968.

In general, persons expose themselves to, perceive, and remember messages in a selective manner. The 1965 Mississippi investigation reported in this paper tends to bear out these conclusions. Community norms and attitudes seem significantly related to the perception and retention of forest fire prevention messages.

115. THE COMMUNITY; A CLASSIFIED, ANNOTATED BIBLIOGRAPHY. Payne, Raymond, Comp. and Bailey, Wilfrid C., Comp. Georgia University. 1967. 146p. Available from Department of Sociology and Anthropology, University of Georgia, Athens, Georgia 30601 ($3.00). EDRS Order Number 002 747, price in microfiche $0.75, in hard copy $7.40.

This is a classified retrospective bibliography of 839 items on the community (about 140 are annotated) from rural sociology and agricultural economics departments and sections, agricultural experiment stations, extension services. and related agencies.

116. CURRENT SOCIOCULTURAL CHANGE LITERATURE; AN ANNOTATED CLASSIFICATION OF SELECTED INTERDISCIPLINARY SOURCES. Knop, Edward and Aparicio, Kathryn. North Dakota University. 1967. 282p. Available from the Center for the Study of Cultural and Social Change, North Dakota University, Grand Forks, 58202.

A compendium of selected interdisciplinary sources on sociocultural change, this publication contains over 2,700 annotated items on change in institutional, structural, ideological, and psychological dimensions of life in advanced and transitional urban-industrial settings as well as in folk-agrarian settings.

See also: 5500 COMMUNITY SERVICES AND PROGRAMS; 5550 COMMUNITY DEVELOPMENT PROGRAMS-FOREIGN; 7000 HOME, FAMILY EDUCATION; 189 civil defense community simulation; 219 survey of U.S. programs and syllabuses for training overseas development workers.

2230 Rural Communities

117. BIBLIOGRAPHY ON APPALACHIA; A GUIDE TO STUDIES DEALING WITH APPALACHIA IN GENERAL AND INCLUDING RURAL AND URBAN WORKING CLASS ATTITUDES TOWARD RELIGION, EDUCATION, AND SOCIAL CHANGE. Nelsen, Hart M. and Nelsen, Anne K. Western Kentucky University. United Presbyterian Church, Philadelphia, Pennsylvania. April 1967. 76p. EDRS Order Number ED 024 512, price in microfiche $0.50, in hard copy $3.90.

References concerning attitudes toward religion, education, and social change have been compiled for use in developing religious education programs in Appalachia. An attempt is made to consolidate findings in the areas of sociology, social stratification, and social change. Materials date from the early 1900's to the middle 1960's.

118. THE APPALACHIAN PRESBYTERIAN; SOME RURAL-URBAN DIFFERENCES. A PRELIMINARY

REPORT. Nelsen, Hart M. Western Kentucky University. United Presbyterian Church, Philadelphia, Pennsylvania. February 1968. 64p. EDRS Order Number 024 509, price in microfiche $0.50, in hard copy $3.30.

Persons from rural, urban and metropolitan areas of Appalachia were interviewed for gathering information influencing religious education programs. Information, was obtained pertaining to family characteristics; attitudes toward education, welfare, and society; theological beliefs and church involvement; and attitudes toward Christian education and the church school program. Significant differences existed by area of residence.

119. A REGIONAL APPROACH TO THE WAR AGAINST POVERTY. Taylor, Theodore J. Texas Technological College, Lubbock. Department of Economics. March 1968. 140p. EDRS Order Number ED 027 479, price in microfiche $0.75, in hard copy $7.10.

The purpose was to determine the extent of poverty in some rural areas of Texas, to evaluate the attitudes of local leaders toward the anti-poverty effort, and to prescribe remedial action. Much of the work was inconclusive, and in many cases the data were insufficient. Some conclusions were: (1) an annual census-type survey in the area, combined with an input-output analysis by the regional planning body, can eliminate the deficiency in reliable data; (2) the most important form of poverty is the lack of education; (3) transportation facilities, racial discrimination, and lack of skills contribute to this lack; (4) poverty can as easily be identified by its effects as by its causes; (5) private charitable groups are totally inadequate to the task of eliminating poverty.

120. MIGRATION OF RURAL YOUNG ADULTS IN NEBRASKA. Orr, John David. Nebraska University. Ed.D.Thesis. 1967. 243p. University Microfilms Order Number 68-3798, price in microfilm $3.15, in Xerography $11.05.

121. THE INFLUENTIALS IN A SELECTED RURAL COUNTY; THEIR INHERENT CHARACTERISTICS AND INTERRELATIONSHIPS. Abbott, George Carlyle. Virginia Polytechnic Institute, Blacksburg. M.S.Thesis. August 1967. 139p. Available from Virginia Polytechnic Institute, Blacksburg, Virginia 24061.

The reputational method was used in identifying influentials in a rural agricultural county. The 23 top influentials were aged 32 to 81; all but two were county natives. Farmers and retail merchants predominated. The 12 county wide influentials were older, had more associations with each other, and had held a larger number of formal positions than the local community influentials. All influentials were interrelated through organizations and business contacts and appeared to comprise a unitary structure in which each person possesses a complex of factors that contribute to his power. Past achievements were seen as one of the most important factors.

122. EDUCATION INTERESTS OF ADULTS IN MARION COUNTY, IOWA. Freeman, Richard Taylor. Iowa State University of Science and Technology. M.S.Thesis. 1967. 79p. Available from Iowa State University of Science and Technology, Ames, Iowa 50012.

An investigation was made of educational interests of adults in Marion County, Iowa; differences in interests by sex and other characteristics; participation in programs of the Cooperative Extension Service the previous five years; and priorities for future Extension programs.

123. INFORMATION SOURCE AND NEED HIERARCHIES OF AN ADULT POPULATION IN FIVE MICHIGAN COUNTIES. Reiger, Jon H. and Anderson, Robert C. Michigan State University, East Lansing Institute for Community Development. February 1968. 22p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968.). EDRS Order Number ED 017 809, price in microfiche $0.25, in hard copy $1.20.

In a 1965 survey of five counties in Michigan, data on information sources and needs were obtained from a two percent sample of households. The population was found to rely heavily on the mass media and various kinds of reading matter for all topic areas and on institutional sources and officials in certain cases. Young adults relied also on friends and relatives and exhibited the highest level of need for new information. Adult education programs were significant sources in few topic areas and for only selective clientele groups.

124. AN INVESTIGATION OF THE STANDARD-NONSTANDARD DIMENSION OF CENTRAL TEXAN ENGLISH. PART OF THE FINAL REPORT. Stolz, Walter and Bills, Garland. August 1968. 51p. Texas University. EDRS Order Number ED 026 130, price in microfiche $0.25, in hard copy $2.65.

See also: 130 adult education methods preferred by residents of Columbia County, Wisconsin; 241 factors related to participation of rural young adults; 269 rural poverty and survey of programs for rural disadvantaged; 387 rural residents in MDTA program.

2240 Urban Environment

125. URBAN EDUCATION BIBLIOGRAPHY; AN ANNOTATED LISTING. Randolph, H. Helen. Center for Urban Education, New York, New York. April 1968. 110p. Available from Center for Urban Education, 105 Madison Avenue, New York, New York 10016 ($1.00). EDRS Order Number ED 024 474, price in microfiche $0.50, in hard copy $5.60.

This annotated review of literature brings together publications concerning urban education, from September 1964 through December 1965.

See also: 7 educational needs in Beverly, Massachusetts; 8 adult participation patterns in Guelf, Ontario; 205 television in programs for urban poor; 262 career and educational differences between small town and urban women; 330 training programs for urban clergy; 445 leisure use of suburban heads of household; 450 urban middle class knowledge of pesticides; 459 characteristics of parents in Project ENABLE; 474 history of immigrant training in New York City schools

2300 Residential Education

126. CONTINUING EDUCATION IN ACTION; RESIDENTIAL CENTERS FOR LIFELONG LEARNING. Alford, Harold J. 1968. 162p. Available from John Wiley & Sons, Inc., 605 Third Avenue, New York, New York 10016.

This book deals with university continuing education centers emphasizing those at ten pioneering institutions (Michigan State University, Columbia, Oxford, California Polytechnic State College, Notre Dame, The University of Chicago, and the Universities of Georgia, Nebraska, Oklahoma, and New Hampshire) that came into being through the financial assistance of the W. K. Kellogg Foundation. The role and background of continuing education centers, origins of the centers described here, the design and financing of facilities, program planning and presentation (including special degree programs), the use of research and staff training to improve continuing education, approaches to program administration and finance, and anticipated trends in residential continuing education are discussed and documented.

127. A HISTORY OF RESIDENTIAL ADULT EDUCATION. Alford, Harold Judd. Chicago University. Ph.D.Thesis. December 1966. 442p. Available from Department of Photo-

duplication, The University of Chicago Library, Swift Hall, Chicago, Illinois, 60637.

This study traces in detail the development of residential adult education, from the idea which preceded the Grundtvig-Kold Danish folk high schools to the multiplicity of forms existing today, and the social and personal forces which have helped shape its development in various cultural settings. Programs in an agrarian society, an industrial society, and an expanding society are exemplified, respectively, by the Danish movement of the nineteenth and twentieth centuries, British short-term residential colleges and antecedents in the form of Workers' Educational Association work and other activities, and the rise of the Chautauqua movement, Danebod, and such specialized American schools as the Highlander Folk School. Residential centers and programs at the University of Minnesota and the University of Florida are described, together with Kellogg Foundation undertakings at Michigan State University and elsewhere. Programs at Oxford University and in Canada, Denmark, Israel, Germany and black Africa are reviewed, and present trends, conditions, and points of view are discussed. An appendix, 242 references and a historical overview (1851-1951) are included.

128. STUDIES AND TRAINING IN CONTINUING EDUCATION; A DIRECTORY OF RESIDENTIAL CONTINUING EDUCATION CENTERS IN THE UNITED STATES AND ABROAD, 1967-68. Chicago University. August 1968. 156p. EDRS Order Number ED 027 497, price in microfiche $0.75, in hard copy $7.90.

A descriptive list of residential continuing education centers in the United States, Canada, and abroad known to be operating in 1968. Also listed are institutions (39 in the United States and one each in India, Jerusalem, and New Zealand) now constructing or acquiring continuing education centers

See also: 3000 CONFERENCES, INSTITUTES, WORKSHOPS; 469 historical development of university conferences and residential centers; 485 folk high school in Sweden.

2600 INSTRUCTIONAL METHODS

129. TRAINING METHODOLOGY. PART 3: INSTRUCTIONAL METHODS AND TECHNIQUES; AN ANNOTATED BIBLIOGRAPHY. National Communicable Disease Center, Atlanta, Georgia. 1968. 143p. EDRS Order Number ED 024 880, price in microfiche $0.75, in hard copy $7.25.

One of a series of bibliographies on mental health inservice training and training methodology, this publication contains 346 abstracts (largely 1960-68) on apprenticeship, coaching, programmed instruction, correspondence study, lectures, group discussion, meetings, simulation and gaming, conferences, case method, role-playing, laboratory training, team training and organizational development, and other individual and group methods and instructional techniques. A subject index is included.

130. METHOD ORIENTATION OF ADULTS FOR PARTICIPATION IN EDUCATIVE ACTIVITIES. Blackburn, Donald J. and Douglah, Mohammad A. 1968. 22p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). EDRS Order Number ED 017 859, price in microfiche $0.25, in hard copy $1.20.

This study was undertaken to determine the method orientation of adults for participation in education activities. For the majority of the subject areas, group methods were preferred by the majority of adults. Adults preferring individual methods were more likely to be older, with relatively low educational levels and family incomes, with the highest proportion of individual orientation appearing among women with eight years or less of schooling.

131. RELATIONSHIPS BETWEEN TRAINING METHODS AND LEARNER CHARACTERISTICS. Tallmadge, G. K. In Journal of Educational Psychology; v59 n1 p32-6 February 1968.

To determine whether training effectiveness could be increased by employing training methods which differed as a function of trainee characteristics, study was designed involving a control and two experimental training methods and 16 measures of trainee aptitudes and interests. The experimental training methods were designed to reflect Gagne's (1965) Type 3 (Chaining) and Type 7 (Principle Learning) theoretical constructs. Large achievment differences resulted from the three methods. No interactions between training methods and learner characteristics were found. It was concluded that these negative findings resulted from the existence of interactions between subject matter content and training methods.

132. PSYCHOLOGICAL RESEARCH IN ADULT LEARNING. DuBois, Philip H., Ed. Washington University, St. Louis, Missouri. 1968. 71p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-672-748, price in microfiche $.65, in hard copy $3.00.

Topics were the systems approach to learning, computer assisted instruction, the role of simulation in training, programed instruction, educational technology in technical training, the learning of operational equipment as a criterion in training research, and the evaluation of a partially self-paced course.

133. PARTICIPATION IN PESTICIDE EDUCATION PROGRAMS AND CHANGES IN OPINION LEADERSHIP ACTIVITIES. Looby, Lawrence E. 1969. 20p. Paper presented at National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 025 726, price in microfiche $0.25, in hard copy $1.10.

A study was made to see if an educational program on pesticides would increase the opinion leadership activities of pesticide dealers and the amount and quality of information they conveyed to their customers. Educational programs provided included workshops, classes, and conferences as well as bulletins, brochures, and radio and television programs. Participation did not appear to increase opinion leadership activities; however, the scale used did not measure actual effects of the activities. Nominations of the opinion leaders by their customers, who mentioned them as sources of information, seemed to confirm the opinion leadership scale.

134. ROLE OF INFORMATION SOURCES AND COMMUNICATION CHANNELS IN ADOPTION OF IMPROVED PRACTICES BY FARMERS IN M.P. STATE, INDIA. Sharma, Devendra Kumar. Cornell University. Ph.D.Thesis. 1967. 265p. University Microfilms Order Number 67-16,368, price in microfilm $3.45, in Xerography $11.95.

A study was made of information sources and channels whereby new ideas about improved farming methods are communicated to farmers in Madhya Pradesh, India. Of the five information sources, neighbors were named by all respondents, village level workers by 72%, chairmen of village panchayats by 26%, and agricultural and university extension personnel by 20% and 17%, respectively. Among seven means of communication, demonstrations led with 50%, followed by radio (38%), audiovisual aids (posters, films, exhibits), general meetings, and reading materials. Age, education, caste, and economic status were discriminating factors, singly or in combination, in the use of all sources except neighbors and village local workers. Contacts between extension agents and farmers had the greatest influence, and mass media the least influence on adoption

See also: 14 university course on adult education methodology; 360 trends in training methods and aids revealed in six years of CIRF Abstracts.

135. THE DISCOVERY METHOD; AN INTERNATIONAL EXPERIMENT IN RETRAINING. EMPLOYMENT OF OLDER WORKERS, 6. Organisation for Economic Co-operation and Development, Paris (France). 1969. 86p. Available from OECD Publications Center, Suite 1305, 1750 Pennsylvania Avenue, N.W., Washington, D.C. 20006, Order Number 24,941, ($3.00).

Demonstration programs were used in training older workers in four member countries of the Organisation for Economic Co-operation and Development, using traditional methods and the discovery (discrimination learning) method. Overall findings seemed to indicate that the discovery method is useful if tuned to a given group and that, with appropriate training, a higher than usual training age gives no serious disadvantage.

136. INSTRUCTIONAL TECHNIQUES FOR TEACHING ADULT COLLEGE CREDIT COURSES. Dubois, Philip H., and others. Office of Education, Washington, D.C. Bureau of Research. Final Report. 31 December 1968. 48p. EDRS Order Number 027 494, price in microfiche $0.25, in hard copy $2.50.

This study of adult students in elementary psychology classes at Washington University (St. Louis), compared the effectiveness of conventional conditions, in which the instructor sets the stage and full participation in a program of class activities is explicitly or implicitly demanded, with that of permissive conditions, in which students may choose the degree of participation in activities established by the instructor. The correlation was positive between permissive conditions and achievement. There is some evidence that adults learn better under conditons of "elective participation".

137. FACTORS RELATED TO THE EFFECTIVENESS OF TEACHERS OF SHORT-TERM ADULT VOCATIONAL COURSES. Jones, Charles Irving. Florida State University. Ed.D.Thesis. 1967. 190p. University Microfilms Order Number 67-11,161, price in microfilm $3.00, in Xerography $8.60.

Data obtained from vocational teachers and adult students included measures of student verbal gain, manual gain, satisfaction, and persistence, and of teachers' educational level, experience teaching adults, years of trade experience, age, mental ability, subject matter knowledge, teaching style, and number of teaching techniques used. The teacher's mental ability, age, and teaching experience were not correlated with student satisfaction, persistence, and verbal and manual gain. Verbal and manual gain were correlated with teacher's subject knowledge. Teacher's educational level was negatively correlated with student satisfaction and years of trade experience was negatively correlated with persistence. Teaching style and number of techniques used did not influence students. Student manual gain was positively correlated with verbal gain and negatively correlated with satisfaction and persistence.

138. A STUDY OF DIFFERENT STYLES OF EDUCATIONAL MATERIALS FOR ADULT NEW LITERATES. Cortright, Richard Watkins. The American University. Ed.D.Thesis. 1967. 194p. University Microfilms Order Number 67-12,036, price in microfilm $3.00, in Xerography $8.80.

Three experiments tested the effectiveness of three teaching styles -- the expository, the conversational, and the interrogative. The population comprised adults in adult basic education classes in two large Eastern cities. In each experiment three different expository passages, one each from three current publications for adult new literates, were rewritten in linguistically comparable conversational and interrogative styles. Equality in difficulty was also obtained. None of the three styles was significant in differentiating the comprehension of adult basic education students. The experiment did not support a

generalization that the conversational style is most effective.

139. CHANGES IN PERCEPTION OF SELECTED CONCEPTS THAT ACCOMPANY DIFFERING LEADERSHIP TREATMENTS. Callan, Laurence Brian. Arizona State University. Ph.D.Thesis. 1967. 130p. University Microfilms Order Number 67-3196, price in microfilm $3.00, in Xerography $6.20.

A study was made of effects of two leadership treatments on perception of nonverbal stimuli relating to concepts of leaders, authority, and cohesion as measured by changes in the Semantic Differential Scale. Subject (28 Yaqui Indian and Mexican-American members of the Neighborhood Youth Corps) were randomly assigned to an autocratic group, with closely specified tasks and goals and little interaction, or a democratic group, marked by emphasis on interaction among youth and with the leaders, with leadership evolving from the group. Stimuli consisted of color slides on ten concepts or roles (doctor, judge, nurse, and others) representing leaders, authority, and cohesion. Perceptions of nonverbal stimuli can be changed following a leadership treatment, and the democratic treatment is preferable. However, the experimental design and other circumstances created doubt whether leadership was the sole influence.

140. STUDIES ON THE AFFECT OF PARTICIPATION IN TRAINING AND SUPERVISORY PROGRAMS. Dimock, Hedley G. 1969. 5p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 023 984, price in microfiche $0.25, in hard copy $0.35.

This study describes the procedures used to evaluate the effect of 28 leadership development programs for young and middle-aged adults. The educational experiences were divided into 4 groups depending on the level of the learners' participation and the extent to which the learning was focused on their interests and experiences. These factors were rated on a subjective basis by the author. From a variety of approaches to predicting successful group leaders, a series of short questions that actually discriminated successful from unsuccessful group leaders were selected. Three attitude questionnaires were put together in a leadership inventory and studies of its reliability ranged from .70 to .90. Studies of its validity in eight field situations ranged from .23 to .69. High participation led to a more significant attitude change than low participation.

141. STUDY OF TRAINING EQUIPMENT AND INDIVIDUAL DIFFERENCES: THE EFFECTS OF SUBJECT MATTER VARIABLES. American Institute for Research in the Behavioral Sciences, Palo Alto, California. 70p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-671-842, price in microfiche $0.65, in hard copy $3.00.

To determine if learning might be enhanced by using instructional methods differing in design according to learner characteristics, two courses were developed, one an inductive teaching approach and the other a deductive method. For each subject 28 measures of aptitudes, interests, and personality variables were obtained. Results strongly supported the existence of learning styles, and suggest that multitrack instruction based on learning styles might be a way of enhancing learning. Those individual difference measures which interacted with method and content were all noncognitive--an indication that learning styles may also be independent of specific aptitude or ability traits.

142. KNOWLEDGE OF CONFERENCE OBJECTIVES AND EFFECT UPON LEARNING. Blaney, John P. and McKie, Douglas. In Adult Education; v19 n2 p98-105 W 1969.

Research was conducted to determine whether knowledge of instructional objectives in an adult education program assists participants to attain these objectives. Participants were randomly placed into three groups: group A was provided with

behavioral instructional objectives; B with a general orientation of the program; and C with a pretest. The presentation of behaviorally stated objectives resulted in Group A doing significantly better on the criterion test at the .05 significant level.

143. TRAINING FOR VIGILANCE: REPEATED SESSIONS WITH KNOWLEDGE OF RESULTS. Weiner, E. L. Miami University. 10p. In Ergonomics; v11 n6 p547-56 November 1968.

Two groups participated in a visual monitoring test of 48 minute sessions on five consecutive days, with a followup transfer session five weeks later, to examine differences between knowledge of results (KR) and no knowledge of results (NKR) over several training sessions and prolonging the interval before the transfer session. The KR group was provided with instant feedback of correct responses, commissive errors, and missed signals. It was found that the KR group showed superior and constantly improving detection performance, but the control group also showed almost identical improvement. Commissive errors were significantly different in the first two training sessions, with KR students showing more false alarms. Commissive errors did not increase or decrease over time within sessions, or over the five training sessions. There was no significant difference in the followup treatment.

144. STUDIES ON TRAINING GROUND OBSERVERS TO ESTIMATE RANGE TO AERIAL TARGETS. McCluskey, Michael R. and others. George Washington University, Washington, D.C. HumRRO. May 1968. 65p. Clearinghouse on Federal Scientific and Technical Information Order Number AD-669-963, price in microfiche $0.65, in hard copy $3.00.

Six pilot studies were conducted to determine the effects of training on range estimation performance for aerial targets. Several variations of training methods were used, including immediate knowledge of results after making an estimation, "paired associate" presentation of observed aircraft position with actual range information, and the use of an obstructing object as a range estimation aid. Two variables that tended to influence performance were aircraft elevation and incoming-outgoing directions of flight.

145. TWO TRACK TRAINING FOR AVIONICS FUNDAMENTALS. FINAL REPORT. Johnson, Kirk A. and Salop, Phyllis A. United States Naval Personnel Research Activity, San Diego, California. September 1968. 41p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-678-348, price in microfiche $0.65, in hard copy $3.00.

An experimental two track training system was evaluated against the conventional one track system. The conventional course lasted 16 weeks. The two track system consisted of a regular track identical to the conventional course, and an accelerated track lasting ten weeks. Students in the two track system made grades roughly one point lower than those of students in the one track system. This difference became about half a point in subsequent courses. The two track system reduced training time by 1.38 weeks per student.

146. TASK COHERENCE, TRAINING TIME, AND RETENTION INTERVAL EFFECTS ON SKILL RETENTION. Naylor, James C. and others. 8p. In Journal of Applied Psychology; v52 n5 1968.

Amount of training, secondary task coherence (amount of task organization), and length of retention interval, each at two levels, were evaluated in terms of long term skill retention effects. The criterion task was composed of a three dimensional tracking task (primary task) and a nine event monitoring task (secondary task). Retention loss varied inversely with amount of training and with secondary task coherence (the latter only under the lesser level of training) for both tasks. Absolute retention levels varied directly with the training and task coherence variables and inversely with retention interval. From these and previous

data, task coherence emerges as an important variable in task acquisition and retention.

147. SOME EFFECTS OF AMOUNT OF VERBAL PRETRAINING AND AVAILABILITY OF VERBAL LABELS UPON PERFORMANCE IN A DISCRIMINATIVE MOTOR TASK. Marshall, M. E. Carelton University, Ottowa. 13p. Reprint from Perceptual and Motor Skills, v26 p27-39 1968.

The study randomly grouped college students into ten treatment groups, in which they were given three, six, nine, 15 or 30 trials of relevant or irrelevant verbal pretraining prior to 21 trials on a common discriminative motor task. Relevant pretraining facilitated motor performance significantly, and increasing amounts of relevant pretraining increased the amount of specific proactive facilitation. Superior motor performance was related to the subsequent correct recall of verbal pretraining responses.

148. EFFECTS OF STRUCTURE AND SEQUENCE ON ADULT LEARNING. Groteleuschen, Arden. Columbia University. 1968. 20p. Paper presented at the National Seminar on Adult Education (Chicago, February 11-13, 1968). EDRS Order Number ED 017 811, price in microfiche $0.25, in hard copy $1.10.

In this study on the effects of structure and sequence on adult learning, adults unfamiliar with number bases and ranging in age from 23 to 53 were randomly assigned to four differentially structured introductory materials and to three differentially sequenced learning task conditions (random, partial or complete) within four intelligence and two sex categories. Subjects were individually presented the base four task in paired associate form after they had received the programed introductory material. The introductory material appeared to have significantly positive results only with subjects having superior intelligence. The completely sequenced learning task resulted in more rapid mastery, especially with less intelligent subjects. Reliable differences among the intelligence categories and between the sexes were also observed.

See also: 61, 62 challenging versus supportive instructions in verbal learning of older adults; 109 leadership styles of community change agents; 394 behavior modification through social reinforcement learning in Job Corps.

2730 Lecture

See: 11 history of Lyceum movement: 149 lecture-demonstration and programmed instruction in teaching accounting.

2740 Personal Contact, Visits

See: 3050 DEMONSTRATION; 92 informal helping relationships among adults; 455 working visits in homemaking education.

2780 Programmed Instruction

149. THE EFFECTIVENESS OF TWO DIFFERENT USES OF AN AUTOINSTRUCTIONAL PROGRAM TO TEACH THE USE OF THE AIR FORCE FISCAL ACCOUNT STRUCTURE AND CODES. Askins, Billy Earl. North Texas State University, Denton. Ed.D.Thesis. 1967. 198p. University Microfilms Order Number 76-15,013, price in microfilm $3.00, in

Xerography $9.00

The problem of the study was the effectiveness of three teaching techniques--lecture-demonstration procedure supplemented with the programed textbook, autoinstructional procedure using only the programed textbook, and the conventional lecture-demonstration procedure. Students taught with the lecture-demonstration procedure with the programed textbook made a significantly higher mean gain score than students taught either with the autoinstructional or conventional lecture-demonstration procedure. Students taught solely with the autoinstructional procedure required less time to complete the unit than students taught with the other two techniques. No significant differences were found among the retention loss scores of the three groups nor between the student's mean gain score and his reading ability, general intelligence, and educational level.

150. COMMUNICATION, COOPERATION, AND NEGOTIATION IN CULTURALLY HETEROGENEOUS GROUPS. QUARTERLY REPORT. Fiedler, Fred E. and Triandis, Harry C. Illinois University. 31 January 1968. 19p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-664-681, price in microfiche $.65, in hard copy $3.00.

Studies concern the development of basic data on semantic features and culturally significant behavior, the dynamics of interactions in negotiation and bargaining, the effect of task structure on group climate and group interaction, and relevant methodological issues. The two major studies concern a comparison of training by means of Culture Assimilators and essays, as well as a comparison of training materials developed by methods developed by Triandis and Osgood. The second study involved the development of an Iran Culture Assimilator and a field experiment to evaluate its effect.

151. CROSS-CULTURAL TRAINING AS A MEANS FOR IMPROVING SITUATIONAL FAVORABLENESS. Chemers, Martin M. Illinois University, Group Effectiveness Research Laboratory. August 1968. 31p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-676-234, price in microfiche $0.65, in hard copy $3.00.

A field experiment was conducted in Iran to test the effects of cross-cultural training materials on leader behavior and effectiveness. Forty-eight Americans living in Teheran were administered either the Culture Assimilator, a programed self-instructional training program for Iranian culture, or a control training program on the physical geography of the Middle East. Cultural training proved quite effective in changing behavior. Situational favorableness and cultural role expectations were significant determinants of leader effectiveness in culturally heterogeneous groups.

152. PROGRAMMED LEARNING IN CENTRAL AFRICAN CONTEXTS. Hawkridge, D. G. Rhodesia University College. 91p. EDRS Order Number ED 019 005, price in microfiche $0.50, in hard copy $4.65.

Since 1964, the Programmed Learning Centre at the University College of Rhodesia has been investigating the potentialities of programmed learning for Central Africa through a series of controlled experiments using locally-written and published programs. Programs dealing with topics such as simple contours, how people learn, and the 1802 Factory Reform Act have been tested with generally favorable results. Other longer-term and less rigorously controlled in-school trials of programs have given varying results. Much research is still in progress. The appendix contains a catalog of holdings at the Programmed Learning Center.

153. ADULT TRAINING: THE USE OF PROGRAMMED INSTRUCTION. Neale, J. G. and others. 9p. In Occupational Psychology, v42 n1 p23-31 1968.

Two experiments were conducted in which programed instruction was used to teach factual information to young and older adults. Trainee bus conductors were taught to read fare charts; tests were given after the one hour lesson and after experience on the bus route. For younger adults (under 30) the programed instruction proved superior to classroom instruction; for the older adults, classroom instruction was better, but not significantly so. In a second experiment, women students at teachers training colleges were taught map reading for five hours during one week, in an effort to estimate the optimum length of teaching session within the five hours. The younger students (under 35) did better with 1/2 hour sessions and the older students (over 35) did better with one hour sessions.

154. RESEARCH ON THE USE OF PROGRAMMED INSTRUCTION AMONG ADULT LEARNERS IN PROFESSIONAL HEALTH FIELDS. Lysaught, Jerome P. 1968. 15p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). EDRS Order Number ED 017 879, price in microfiche $0.25, in hard copy $.85.

As part of an effort to explore the use of self instructional materials in educating doctors, nurses, paramedical personnel, and patients, three studies of program utilization and effectiveness were made. In the allergy program, course completions, positive reactions, perception of practical value, and favorable responses indicated that programed materials would be welcomed by health practitioners. In the cancer program. achievement showed that programed instruction taught effectively and better than traditional methods.

See also: 132 programmed instruction; 208 programmed text and teaching machine in Job Corps math programs; 275, 281 programmed instruction and computer-aided instruction in adult basic education; 464 Culture Assimilators (programmed instruction) in cross cultural training.

2800 Correspondence Study

155. CORRESPONDENCE INSTRUCTION IN THE UNITED STATES; A STUDY OF WHAT IT IS, HOW IT FUNCTIONS, AND WHAT ITS POTENTIAL MAY BE. MacKenzie, Ossian and others. 1968. 276p. Available from McGraw-Hill Book Company, 3330 West 42nd Street, New York, New York 10036 ($6.95).

A definitive study of correspondence study in the United States, this book covers its historical development, current practices, quality, fundamental characteristics, and present and possible roles in American education. Types of sponsors (the armed forces, the U.S. Armed Forces Institute, Federal government, private home study schools, universities and colleges, religious organizations, business and industry, labor unions, and associations) are covered. Flexibility, economy, and other advantages of the method are noted. The authors feel, however, that correspondence instruction is not presently fulfilling its potential; problems in such areas as financing, staffing, public acceptance, and in course planning, administration, and feedback and evaluation, are among the reasons given. The systems approach, greater cooperation among suppliers, specialized teacher training, multimedia instruction, cooperative facilities and research units, uniform accrediting and program standards, and a national examining university are cited as needed innovations, and specific recommendations for implementation are made.

156. VARIABLES ASSOCIATED WITH CORRESPONDENCE STUDY, A STUDY TO TEST TWELVE HYPOTHESES. Donehower, Grace M. Nevada University. January 1968. 28p. EDRS Order

Number ED 016 925, price in microfiche $0.25, in hard copy $1.50.

The purpose of this University of Nevada study was to determine if relationships existed between the degree of success in college level courses and such correspondence student variables as age, sex, achievement, completion, withdrawal, reason for enrolling, distance from the correspondence center, previous education, and the time elapsed between enrollment and the submission of the first assignment. Significant relationships were found between completion rates and the variables of time lapse before submission of the first lesson, distance from the center, previous education, and the reason for enrolling, and between the time required for course completion and the reason for enrolling, but not between completion time and distance or between achievement and the variables of age, sex, and course completion time.

157. MODERN TEACHING METHODS AND THE MERCHANT NAVY. Carver, Alfred. Seafarers Education Service, London (England). National Institute of Adult Education, London (England). 1967. 46p. Available from National Institute of Adult Education, 35 Queen Anne Street, London W.1, England (7s.6d.).

About 5% of British seafarers are pursuing correspondence study, largely in vocational subjects. An evaluative report has been made on correspondence offerings and programed instruction provided by the Royal and Merchant Navies and the College of the Sea, as well as on teaching at sea and the uses of tape recorders, films, slides, science kits, reading materials, shipboard equipment, and other instructional aids. Recommendations cover the organization of training, policies and practices of the College of the Sea, and instructors and their preparation.

See also: 468 c/s in American Institute of Sacred Literature; 469 development of university c/s, 1900-1965; 477 c/s in Army training.

2900 Discussion

158. A STUDY OF TWO GROUP DISCUSSION PROCEDURES FOR CHANGING ACCEPTANCE OF SELF AND OTHERS. Partin, James Jennings. Indiana University. Ph.D.Thesis. 1967. 154p. University Microfilms Order Number 68-2340, price in microfilm $3.00, in Xerography $7.20.

Primary purpose was to determine the effects of two training programs for mental hospital attendants; a secondary purpose was to determine the relationship between acceptance and neuroticism. The subjects were 39 adult attendant employees at a state institution for the mentally retarded. Treatment groups met twice weekly for training in developing therapeutic interpersonal relationships on a one to one basis and in groups. One group discussed prescribed topics and the other chose its topics. Data were gathered at a pre-test and a post-test battery of tests, consisting of the Acceptance Attitude Scale (developed for the study), the Fey Questionnaire, and the IPAT Neuroticism Scale Questionnaire. The findings indicated that acceptance of self was more difficult to change than acceptance of others. There were no differences of means significant at the .20 level between experimental and control groups.

159. THE EFFECT OF GROUP DISCUSSION AS A LEARNING PROCEDURE ON THE ADAPTIVE SOCIAL BEHAVIOR OF EDUCABLE ADULT MENTAL RETARDATES. Curtis, Nels. Indiana University. Ed.D.Thesis. June 1967. 203p. University Microfilms Order Number 67-16,398, price in microfilm $3.00, in Xerography $9.25.

This study investigated changes in the adaptive social behavior of educable, mentally retarded adults who participated in a group discussion program in a

state hospital and training center. It appears that the selective use of group discussion can do much to maintain and improve the social adaptive behavior of educable, adult mental retardates; and that group composition (preferably homogeneous) is important to the effectiveness of group discussion as a learning procedure. Recommendations included adaptations of this procedure to the diagnosed needs of participants, minimal use of lecture techniques, and avoidance of abstraction. Longitudinal studies and other research were also advised.

160. A STUDY OF DELAYED ACHIEVEMENT IN A SHORT-TERM ADULT EDUCATION PROGRAM. Steffer, Robert Wesley. Indiana University. Ph.D.Thesis. 1967. 164p. University Microfilms Order Number 68-2365, price in microfilm $3.00, in Xerography $7.60.

This study aimed at measuring the results of a participation training program after one year. Two experimental groups were administered a test of delayed achievement twice; one received a 15-minute treatment review on the principles of participation training in group discussion between the test administrations; the other took the test a second time after a 15-minute interval, receiving no treatment. The third group, an inside control group, was composed of individuals active in church adult education classes; the fourth and fifth groups were inside and outside groups composed of persons not active in adult education groups. Those with training and some randomly-selected, untrained representatives of adult education groups were interviewed. Trained adults achieved significantly higher scores on the delayed achievement test than non-trained adults; non-trained adults were significantly higher on the delayed achievement test than non-trained adults; post-test scores of the group receiving the treatment-review differed significantly from the scores of the group not receiving the treatment-review.

161. PRERETIREMENT EDUCATION FOR HOURLY-RATED EMPLOYEES. FINAL REPORT. Hunter, Woodrow W. Michigan University. June 1968. 127p. EDRS Order Number ED 024 908, price in microfiche $0.50, in hard copy $6.45.

To test preretirement educational materials and methods for hourly rated workers and to determine the effects of participation in a group discussion preretirement education program, a study was undertaken with 88 automobile workers (aged 60 or more) and 54 wives as volunteers. The discussion program did not seem to have changed workers' attitudes toward life in general, retirement, health, or income, but it encouraged participants to take preparatory retirement steps. Wives in the experimental group completed the program with significantly more favorable scores on health, self-appraisal and retirement income, while wives in the control group had a higher score on present income attitudes.

162. REACHING THE HARD-TO-REACH: THE USE OF PARTICIPANT GROUP METHODS WITH MOTHERS OF CULTURALLY DISADVANTAGED PRESCHOOL CHILDREN. Wohlford, Paul and Stern, Harris W. Miami University. Paper presented at the annual meeting of the American Orthopsychiatric Association, Chicago, Illinois, March 1968. March 1968. 7p. EDRS Order Number ED 024 469, price in microfiche $0.25, in hard copy $0.45.

Thirteen Negro mothers of preschool children who attended a day care program participated in a series of six weekly meetings led by an educator and devoted to (1) discussion and demonstration of ways the mothers could expand their children's learning skills and (2) discussion of aspects of the mother-child relationship. In general, all of the mothers seemed quite concerned about their competency as mothers; but because of the small extent of the program's impact, it seems unlikely that it was very effective in modifying the mothers' behavior.

163. PSYCHOLOGICAL RESEARCH & SENSITIVITY TRAINING, A COLLECTION OF ANNOTATED ABSTRACTS FOR 1967. Capling, R. G., Comp. Canadian Association for Adult Education, Toronto (Ontario). 1968. 45p. EDRS Order Number ED 022 100, price in microfiche $0.25, in hard copy $2.35.

The Canadian Commission on Human Relations Training sponsored a conference in Toronto in April 1968 to focus on six major concerns of Canadian trainers--trainer development, communication, research, theory and design (of training), public acceptance, and participant satisfaction. This compilation and commentary of 90 items of 1967 research, gleaned from PSYCHOLOGICAL ABSTRACTS (subsections on developmental psychology, social psychology, physiological psychology, animal psychology, experimental psychology, personality, clinical psychology, educational psychology, and military and personnel psychology) was prepared. From these reports, it is concluded that the sensitivity trainer cannot fulfill his professional, ethical, and moral responsibility unless he makes himself familiar with such information. A National Journal on Human Relations Training should be set up to report fully on all relevant research.

164. SENSITIVITY TRAINING: AN ANALYSIS OF TRAINER INTERVENTION AND GROUP PROCESS. Fiebert, Martin S. 10p. Reprint from Psychological Reports v22 p829-38 June 1968.

This paper deals with some of the theoretical and practical considerations underlying sensitivity trainer behavior.

165. A SYMPOSIUM: LABORATORY TRAINING. Dunnette, Marvin D. and others. 45p. In Industrial Relations; v8 n1 p1-45 October 1968.

The main paper examines difficulties of organizations in discovering the major problems of interpersonal behavior common to them; considers what laboratory training advocates claim as their behavioral goals; reviews research studies of the behavioral effects of laboratory training; and offers guidelines for planning future research.

166. THE "LABORATORY APPROACH" TO ORGANIZATION CHANGE; SCHEMA OF A METHOD. Golembiewski, Robert T. 12p. Reprinted from Public Administration Review; v27 n3 p211-21 September 1967.

167. EFFECTS OF T-GROUP TRAINING AND COGNITIVE LEARNING ON SMALL GROUP EFFECTIVENESS. Tolela, Michele. Denver University. Ph.D.Thesis. 1968. 144p. University Microfilms Order Number 68-8639, price in microfilm $3.00, in Xerography $6.80.

A study was made to determine whether learning achieved in a T-group experience is transferred to a problem-solving situation, and to identify possible factors that enhance transfer of training. Experimental subjects were exposed to T-group training with or without theoretical lectures; control subjects were not exposed to T-group training. There was also a problem-solving session in which all groups participated. T-group training does produce behavioral changes in trainees and such changes can be transferred to another situation; but the view that cognitive learning enhances transfer of training was not supported. It is possible, however, that the lectures were not long enough to have a measurable effect.

168. EFFECTS OF HUMAN RELATIONS LABORATORY TRAINING ON FLEXIBILITY AND ATTITUDES TOWARD SUPERVISION. Bringle, Ronald Royce. Oregon University. Ph.D.Thesis. 1967. 149p. University Microfilms Order Number 68-3973, price in microfilm $3.00, in Xerography $7.00.

To assess the effects of a three-day residential human relations laboratory on

flexibility and supervisory attitudes, an instrument constructed by Felker and Smith designed to further 'operationalize' the construct of philosophic-mindedness was used to measure flexibility. Supervisory attitudes were measured by an instrument developed by Scientific Methods, Inc., entitled Managerial Values. It was hypothesized that flexibility would be increased by human relations training; also that 9/9 attitudes toward supervision would be increased. Both hypotheses were supported.

169. INDIVIDUAL CHANGE IN A MANAGEMENT DEVELOPMENT PROGRAM. Valiquet, Michael I. 13p. In The Journal of Applied Behavioral Science; v4 n3 p313-25 1968.

A study was made of actual changed behavior and attitudes on the job of employees of a large industrial concern one year after they had participated in laboratory training. A second purpose was to test the reliability of an evaluation instrument developed by Miles and Bunker and to add to the body of normative data on differential learning outcomes of laboratory training. A sample of 60 experimental subjects and a matched-pair control group were chosen and data were collected by an 'open-ended perceived-change' questionnaire completed by five persons who worked closely with each employee. Co-workers rated the participants as improving significantly in effective initiation and assertiveness, in capacity for collaboration and operational skill in interpersonal relations, and in diagnostic awareness of self and the ability to fulfill perceived needs.

170. THE EFFECT OF A TEAM HUMAN RELATIONS TRAINING LABORATORY ON THE PRODUCTIVITY AND PERCEPTIONS OF A SELLING GROUP. Zenger, John Hancock. University of Southern California. D.B.A.Thesis. 1967. 176p. University Microfilms Order Number 68-5887, price in microfilm $3.00, in Xerography $8.00.

Objectives of this study were to establish that the climate and behavior in work groups can be changed, assess the relationship between productivity and perceptions in such groups, and evaluate the use of team training in bringing about change relating to organizational goals. The two-year study used experimental and control groups of insurance agents, together with supervisors and other managerial personnel. Conventional training was applied to one control group to counteract the Hawthorne effect. Experimental training included three-day team training laboratories and followup sessions involving agents, first-line managers, and their superiors. Measurements of productivity were made before, during, and at the end of the experiment. Agents' incomes increased and the organizational unit rose in overall company rankings as a result of training; positive changes in perceptions of one's superiors and one's peer group also were produced. General conclusions include the following: (1) the experimental procedures contributed to increased productivity; (2) training laboratories involving the lowest level of the organization had greater impact than those with management only; (3) team training laboratories resulted in a general overall positive change in perceptions.

171 THE INFLUENCE OF HUMAN RELATIONS LABORATORY TRAINING UPON THE PERCEIVED BEHAVIORAL CHANGES ON SECONDARY SCHOOL SEMINAR INSTRUCTORS. Krafft, Larry John. Michigan State University. Ph.D.Thesis. 1967. 185p. University Microfilms Order Number 68-4165, price in microfilm $3.00, in Xerography $8.40.

A study was made to determine if the laboratory training method can help teachers be more effective small group seminar leaders, and be more effective in their interaction with fellow educators. Two seminar instructors were selected from each of 17 secondary schools for the laboratory training; and a similar control group was selected for no treatment. It was concluded that the perceived behavioral changes of the laboratory trained participants improved instruction in seminar classes and made an impact on co-workers, teachers, and principals.

172. A STUDY OF THE EFFECTIVENESS OF SENSITIVITY TRAINING IN AN INSERVICE TEACHER-TRAINER PROGRAM IN HUMAN RELATIONS. Lee, Walter Sidney. California University. Ed.D.Thesis. 1967. 129p. University Microfilms Order Number 67-14,312, price in microfilm $3.00, in Xerography $6.20.

To test the effectiveness of sensitivity training in an in-service teacher-training program, this study compared two groups subjected to different experimental treatments and a control group. Results showed that teachers who received sensitivity training improved their scores on the attitude inventory scale and increased their self-esteem on the Q-sort instrument significantly more than those in the control group.

173. THE STRUCTURE OF POSITIVE INTERPERSONAL RELATIONS IN SMALL GROUPS. Davis, James A. and Leinhardt, Samuel. Dartmouth College. August 1967. 54p. National Opinion Research Center, Chicago, Illinois. EDRS Order Number ED 024 086, price in microfiche $0.25, in hard copy $2.80.

The authors sought to test Homans' proposition that small groups inevitably generate a social structure which combines subgroups (cliques) and a ranking system.

174. THE EFFECTS OF THREE STYLES OF TRAINING UPON SMALL GROUP EFFECTIVENESS. Wood, Roy V. and Goldberg, Alvin A. In The Speech Teacher v17 n3 p238-45 September 1968.

This study investigated effects of three styles of training (traditional, T-group, and instrumented laboratory) upon group sentiment, interaction, and productivity. The critic-teacher approach was represented by an experienced trainer's giving group criticisms and suggestions for improvement. In the second group a T group trainer questioned the subjects to stimulate self insight and group awareness. In the instrumented training group a questionnaire was substituted for the trainer. Findings reveal that (1) instrumented training groups rated highest in sentiment; (2) instrumented groups interacted at a level nearly twice as high as in the other groups conditions; (3) the activity level in the instrumented groups was equal to or higher than the activity level in the trainer led groups.

175. TRAINING IN A NON-GROUP. Byrd, Richard E. 10p. In Journal of Humanistic Psychology v7 n1 p18-27 Spring 1967.

Non-group training, in which the individual's growth is stressed, is compared to the classical T-group, in which group productivity is stressed. Goals, learning, new behavior, relationships, agenda, and trainer roles are analyzed for each. A review of pilot study findings reveal that non-group trainees show significant gains over T-groups in personal autonomy, holding values of self actualizing people, expressing feelings in spontaneous action, affirming a constructive view of man, acceptance of agressions as natural, risk taking, interdependence, and self-confidence; while T-group trainees showed greater self-control, awareness of human behavior, acceptance of others, and sensitivity to others' feelings. both groups showed an increased insight into self and roles, functional flexibility, and relational facility.

176. EFFECTIVENESS OF T-GROUP EXPERIENCES IN MANAGERIAL TRAINING AND DEVELOPMENT. Campbell, John P. and Dunnette, Marvin D. 32p. In Psychological Bulletin v70 n2 p73-104 August 1968.

Research studies relating T-group experiences to the behavior of individuals in organizations are reviewed in depth. Attention is also devoted to summarizing the stated objectives of the method and its technological elements. In addition, speculation is offered about the nature and viability of implicit assumptions underlying T-group training. Examination of the Research literature leads to

the conclusion that while T-group training seems to produce observable changes in behavior, the utility of these changes for the performance of individuals in their organizational roles remains to be demonstrated. More research has been devoted to T-group training than to any other single management technique; however, the problems of observation and measurement are considerably more difficult in T-group research than in most other areas.

177. THE IMPACT OF ORGANIZATIONAL TRAINING LABORATORIES UPON THE EFFECTIVENESS AND INTERACTION OF ONGOING WORK GROUPS. Friedlander, Frank. 19p. In Personnel Psychology v20 n3 p289-307 Autumn 1967.

The impact upon four work groups which participated in organizational training laboratory sessions was evaluated in comparison with eight similar groups which did not participate. Criteria were six-factored dimensions, each composed of items gathered from earlier interviews which group members perceived as problems. Significant changes occurred in training groups on the following three dimensions--group effectiveness, mutual influence, and personal involvement. No significant changes occurred in leader approachability, intragroup trust, or the evaluation of group meetings. The relevance of a work unit participating in training as a total group, rather than each member participating in a separate session, was discussed.

178. A COMPARATIVE STUDY OF CONSULTING PROCESSES AND GROUP DEVELOPMENT. Friedlander, Frank. 23p. In Journal of Applied Behavioral Science v4 n4 October-November-December 1968.

The impact of three organizational development consulting processes was analyzed and compared in terms of prelaboratory interaction between consultants and clients, interaction during laboratory sessions, and postlaboratory interaction. Results indicate that the success of the development programs could be much better explained by whether there were prelaboratory and post laboratory consultant activities than by variations in trainer role and behavior or by differences in content and climate of training sessions. The underlying cause for the superiority of an integrated development program over a single laboratory program seems to be the consultant's increased acquisition and use of knowledge of the work group and its organizational context. Among programs relying wholly on laboratory sessions, results were disappointing. Programs in which laboratory sessions were essentially sensitivity training sessions resulted (six months later) in a greater sense of involvement by members of work groups but had little or no impact on other group dimensions of effectiveness and interaction. Laboratories which were active, conceptual, and analytical had no impact on member involvement and trust and resulted in minimum increases in group effectiveness.

179. THE EFFECT OF SOCIABILITY ON THE TYPE AND RATE OF INTERACTION IN SMALL GROUPS. Rose, Harold. 1969. 18p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969. EDRS Order Number ED 025 728, price in microfiche $0.25, in hard copy $1.00.

This study sought to determine the effect of sociability, a personality variable, on the kind and number of statements made by an individual in a group. Subjects were 65 adult basic education workshop participants from Alabama, Florida, Georgia, Mississippi, and Tennessee. They were divided into seven groups by stratified random sampling on age, sex, and race; group leaders were rotated to control the effect of differing leadership styles. Data on interaction, sociability, and demographic factors were obtained with the Reciprocal Category System, a scale of social introversion and extraversion, and a brief questionnaire. All types of interaction but one correlated significantly with interaction rate. None of the demographic variables (age, sex, race, adminis-

trative experience, teaching experience, educational background) correlated significantly with interaction. Implications for research were noted. (Included are ten references and four illustrations.)

180. SENSITIVITY AND SELF-AWARENESS CHANGES: AN EMPIRICAL INVESTIGATION; EVALUATION STUDY OF UNIVERSITY STUDENT T-GROUP. Slocum, John W., Jr. 10p. In Training and Development Journal v22 n9 p38-47 September 1968.

A human relations course similar to one used by the National Training Laboratories was offered, with the students themselves the center of discussion and analysis, outside reading reflecting students' own attitudes and behavior, small groups, and skill exercises for self evaluation and group discussion. Two other courses were given, following the Harvard Business School case study method. Hypotheses were that if a training experience is effective, participants will show increased sensitivity to others and self, self-perception of sensitivity and self-awareness should be consistent with other participants' evaluations, and those higher on the sensitivity and self-awareness scales would tend to be rated more accurately by their group than those lower on the scales. All three hypotheses were supported. Students in the T group had greater changes than students in the other two groups.

181. A STUDY OF SOME EFFECTS OF A PROGRAMMED ORIENTATION ON LEARNING OUTCOMES OF A HUMAN RELATIONS LABORATORY. Searle, Stanley H. and Warlow, G. L. Guelph University, Ontario. August 1968. 11p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). EDRS Order Number ED 017 817, price in microfiche $0.25, in hard copy $0.52.

To test the effectiveness of advanced preparation in the Human Relations Laboratory program of the United Church of Canada, seven delegates to a laboratory held in June 1967 received a 27-page programed orientation two weeks prior to the laboratory. Another eight delegates served as a control group. It was hypothesized that the test group would participate with more functional behavior than the control group, would know more cognitive elements included in the curriculum, possess more favorable attitudes to characteristics of the laboratory, and would have developed greater skill in membership participation and interpersonal relationships. All hypotheses except the one regarding attitudes were rejected, due in part to the laboratory design, readiness and learning set of individual delegates, and some characteristics of one sub-group.

182. LABORATORY EDUCATION IN A UNIVERSITY EXECUTIVE PROGRAM. Bolman, Lee. [1968] 45p. EDRS Order Number ED 026 572, price in microfiche $0.25, in hard copy $2.35.

Four sessions of a program for executives were studied to compare the effects of human relations (T-group) training versus a lecture-discussion approach to interpersonal relations in organizations. Both types of programs produced equal change in participants' stated beliefs about effective interpersonal behavior. Laboratory training showed greater effects on participants' perceptions of themselves and on their behavior as analyzed from tape recordings of case-discussion meetings. There was, however, evidence that the participants had difficulty transferring learning from the T-group to other parts of the program, and that there was considerable "fade-out" of the effects of the training.

183. USING SENSITIVITY TRAINING AND THE LABORATORY METHOD: AN ORGANIZATIONAL CASE STUDY IN THE DEVELOPMENT OF HUMAN RESOURCES. Batchelder, Richard L. and Hardy, James M. National Board of Young Mens Christian Association, New York, New York. 1968. 120p. Available from Association Press, 291 Broadway, New York, New York 10017.

This is both an operational guidebook which translates research findings into

specific working guidelines for using sensitivity training and the laboratory method, and an evaluative research report on the experience of the Young Mens Christian Association in developing human resources among both adults and youth. Internal evaluations are taken, not only from participants and their supervisors, but also from persons who expressed opposition to the whole sensitivity training approach. Internal evidence, evaluated in the context of pertinent research findings from the social and behavioral sciences, is interpreted as tending to affirm the effectiveness of sensitivity training and the laboratory method in developing knowledge of oneself, others, and groups and organizations.

184. THE EFFECTS OF TRAINING IN INTERACTION ANALYSIS ON THE VERBAL BEHAVIOR OF TEACHERS. Jeffs, George A. and others. October 1968. 56p. Ed W. Clark High School, Las Vegas, Nevada. EDRS Order Number ED 023 621, price in microfiche $0.25, in hard copy $2.90.

185. A STUDY OF DEVELOPMENTAL COLLABORATIVE DIAGNOSIS IN SMALL GROUPS OF ADULT LEARNERS. Rominger, Roger Kyle. Indiana University. Ph.D.Thesis. 1968. 222p. University Microfilms Order Number 68-13,689, price in microfilm $3.00, in Xerography $10.15.

The author developed a theory of developmental collaborative diagnosis for small groups of adult learners, constructed a procedural model, and identified possible advantages of such diagnosis.

186. SELF-DIRECTED CHANGE; TWO STUDIES. Kolb, David A. and others. 19p. In Journal of Applied Behavioral Science v4 n4 October-November-December 1968.

These studies describe two experiments testing the effectiveness of a new procedure for self-directed behavior change in a self-analytic group and investigating the effects of variations in the change technique. In both studies, graduate students in industrial management selected personal change goals and worked to achieve them during weekly or biweekly group meetings. Initial commitment to the goal was significantly related to change for subjects in both experiments. The subjects in groups where exchange of feedback about the projects was encouraged reported significantly more change than did subjects in groups where the projects were not discussed. Where subjects were encouraged to discuss the projects, the amount of discussion of the individual's project in the group during the second half of the semester was significantly related to self-perceived change and to group leaders' ratings of change.

2950 Simulation, Gaming

187. INSTRUCTIONAL USES OF SIMULATION--A SELECTED BIBLIOGRAPHY. Twelker, Paul A. and Wallen, Carl J. Oregon State System of Higher Education, Monmouth Northwest Regional Educational Lab., Portland, Oregon. September 1967. 242p. EDRS Order Number ED 019 755, price in microfiche $1.00, in hard copy $12.20.

188. BEHAVIORAL INSIGHTS AND MANAGEMENT GAMING; USING A QUESTIONNAIRE FOR BEHAVIORAL FEEDBACK IN MANAGEMENT GAMING. Fleming, John E. In Training and Development Journal v23 n2 p14-21 February 1969.

A questionnaire was used to study individual and team behavior in a computer-scored management game of medium complexity. The first section explored group effectiveness (formal organization, communication, leadership, decision making); The second dealt with interpersonal relationships (formation of subgroups or cliques, types of relationships, frequency and cause of conflict). Answers were recorded on each individual's questionnaire to provide feedback concerning percep-

tions and viewpoints of other team members. A comparative summary between teams was also made. Written comments by participants were generally favorable. Questionnaire data appeared to be realistic, with characteristics of both consistency and variability within teams.

189. COMMUNITY INTERACTION GAME. Yates, Jules David. December 1967. 72p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-665-383, price in microfiche $.65, in hard copy $3.00.

Describes an Office of Civil Defense research study on the process of adoption and diffusion in future strategy environments. The team was directed to "develop a human simulation experiment in the form of a game to be used as a device for gaining new insights about human behavior in crisis periods and as a training aid. The same procedure will attempt to further synthesize research findings about the nature of community power structure in implementing civil defense programs and the likely effect of heightened international crisis on the expectations, attitudes, and behavior of people". A methodology was explored for simulating such behavior--namely, a game involving participants in interactions resulting from their own actions and decisions.

See also: 132 role of simulation in training

3000 Conferences, Institutes, Workshops

190. IN-DEPTH TEACHING IN EXTENSION. Lutz, Arlen E. and others. 6p. In Journal of Cooperative Extension v6 n2 p107-12 Summer 1968.

To reach a wider audience of rural adults, extension services should stress in-depth teaching of basic concepts. A study was made to assess the value of new workshop-type programs for meeting the needs of Nebraska Extension Service clientele, using a sample of farmers, aged 21-69, who had attended during the winter of 1964-65. Tenants and part owners under 45, with a high school education or better and gross annual farm product sales of over $10,000, were the largest proportion of the sample; 93% indicated that the workshop had dealt with their own interests clearly. Findings suggest that the workshop appeals to farmers above average in income, tenure, and education, but relatively young; that clientele systems are in a constant state of renewal; and that the success of the workshop method requires a team approach by county agents and specialists.

191. MEASURING THE EDUCATIONAL RELIANCE OF A SHORT-TERM TRAINING PROGRAM FOR TEACHERS. Johnson, Raymond L. and others. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969.) February 1969. 17p. EDRS Order Number ED 025 723, price in microfiche $0.25, in hard copy $.95.

A multiple time series design was used to test the effectiveness of short workshops for housewives recruited to teach basic reading to adults in bringing about changes in teacher attitudes and opinions. An attitude and opinion survey questionnaire comprising true-false items was given on three occasions, to all participants of a nine-hour workshop. All the participants answered the questionnaires at the beginning of the workshop but only the members of the experimental group answered them the second time after teaching a class. Sixteen of the 100 items showed significant shifts in responses between times one and two for the experimental group and fourteen for the control group, and virtually all the changes induced in the controls persisted at time three. However, the effects of the workshop were almost totally erased by the experiences in the classroom.

See also: 2300 RESIDENTIAL EDUCATION; 142 effect on learning of knowledge of conference objectives; 444 institutes for training workers with disadvantaged; 469 history of university conferences, institutes, short courses, 1900-1965.

3050 Demonstration

192. INFLUENCE OF AN EDUCATIONAL DEMONSTRATION PROGRAM ON DAIRYMEN'S ADOPTION OF FARM PRACTICES. Brown, Emory J. and Hartman, Joel. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). 1968. 24p. EDRS Order Number 017 860, price in microfiche $0.25, in hard copy $1.30.

Pennsylvania State University and the Tennessee Valley Authority conducted a five year (1961-66) agricultural education project in two Pennsylvania counties. This paper reported the preliminary findings. Using the criterion of adoption of agricultural practices, they attempted to measure the influence of 17 demonstration dairy farms. Data on general agricultural technology, farm management skills, farm practice adoption, patterns of formal and informal activities, interpersonal visiting and communication, and attitudes, goals, and values were gathered by field surveys before and after the action program. Some of the findings indicated that those making the major change in recommended practices were dairymen other than the innovators or early adopters, that the greatest change took place among farmers who had the greatest potential. However, while the educational program did influence changes in adoption, most of the variance was attributed to such factors as individual characteristics, relationships with other persons and organizations, level of farm technology, and varying cultural conditions in the two counties.

193. FACTORS RELATED TO THE ADOPTION OF FARM PRACTICES. Lanham, Orville E. and Brown, Emory J. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). February 1969. 25p. EDRS Order Number ED 025 725, price in microfiche $0.25, in hard copy $1.35.

Dairy farmers in two Pennsylvania counties were studied concerning their adoption of practices used on nearby demonstration farms. A total of 37 variables (including 11 "dummy variables") measured personal characteristics, economic structures of farms, communication sources, and formal and informal participation. Seven of the 37 variables accounted for 46% of the variance in adoption. Five of the seven variables (acreage farmed, farm equipment, participation in agricultural extension programs, participation in economic organizations, number of top twenty farmers talked to) were measures of formal participation, economic structure of farms, and communication sources. The farm equipment index explained over 20% of variance, which indicates that some processes are more applicable to larger, highly mechanized farms. None of the static personality characteristics was significant.

See also: 6700 OCCUPATIONAL TRAINING-AGRICULTURE, HOME ECONOMICS; 452 volunteer study groups in home demonstration

3060 Travel Study

194. THE INFLUENCE OF FOREIGN VISITORS ON THE INTEREST OF CERTAIN ADULT MEMBERS OF A HOSTING COMMUNITY IN PARTICIPATING IN INTERNATIONALLY ORIENTED ACTIVITIES. Benne, Max Erwin. Michigan State University. Ed.D.Thesis. 1967. 145p. University Microfilms Order Number 67-10,507, price in microfilm $3.00, in Xerography $6.80.

3100 Educational Media

195. THE MASS MEDIA IN ADULT EDUCATION: A REVIEW OF RECENT LITERATURE. Ohliger, John. ERIC Clearinghouse on Adult Education. November 1968. 130p. EDRS Order Number ED 024 907, price in microfiche $0.75, in hard copy $6.60.

This review of recent literature in the mass media in adult education outlines the general trends in the uses of the mass media, and examines individual media as well as their use in the various areas of adult education. The bibliography consists of 120 titles, most of which have abstracts.

196. TRAINING METHODOLOGY. PART 4: AUDIOVISUAL THEORY, AIDS AND EQUIPMENT: AN ANNOTATED BIBLIOGRAPHY. National Communicable Disease Center, Atlanta, Georgia, National Institute of Mental Health, Chevy Chase, Maryland. 1968. 124p. EDRS Order Number ED 023 981, price in microfiche $0.50, in hard copy $6.30.

A collection of 332 abstracts and annotations of documents on audiovisual theory and methods, aids, facilities, and equipment, this publication is the fourth part of a bibliography on training methodology in mental health inservice training. Television instruction and equipment, film instruction and equipment, graphic aids, videotape and sound recordings, multimedia instruction, programed instructions, computer assisted instruction, methodological research, and program administration and evaluation are among the subjects represented.

See also: 132 educational technology in training.

3120 Multi-Media Methods

197. AN EXPERIMENTAL STUDY DESIGNED TO TEST THE RELATIVE EFFECTIVENESS OF A MULTI-MEDIA INSTRUCTIONAL SYSTEM. Scheier, Elaine. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). 1969. 8p. EDRS Order Number ED 026 611, price in microfiche $0.25, in hard copy $0.50.

A study compared the effectiveness of Learning 100 (L-100), a multimedia, multimodal, multilevel communication skills system, with that of a more conventional reading program with functional illiterates in a ghetto area in Brooklyn, New York. An experimental group (49 students) and a control group (47 students) were established; teachers were licensed and receiving inservice training. Student attendance records, reasons for dropout, cycle growth and placement at completion, and subjective evaluation by the teachers were collected. On the basis of the Metropolitan Achievement Test, a seven month grade equivalent difference in favor of the L-100 students was found. Teachers found the program raised aspirational levels, was self-evaluative, maintained high interest, and was flexible; instructional materials were rated good to outstanding; however, suggestions were made for more instruction in personal and business letter writing.

198. REQUIREMENT SPECIFICATIONS FOR A DESIGN AND VERIFICATION UNIT. Pelton, Warren G. and others. Technomics, Inc. Santa Monica, California. October 1968. 247p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-677-479, price in microfiche $0.65, in hard copy $3.00. Final report (15 May-15 October 1968).

A research and development activity to introduce training technology into Bureau of Medicine and Surgery training is recommended. Initial research and development are centered on multimedia instructional packages; self contained learning materials and their associated devices, designed using programed learning principles. A second stage of activities includes research in computer-managed training and computer assisted learning.

3150 Audio-Visual

199. DEVELOPMENT OF AN AUTOMATED PROGRAM FOR TEACHING MILITARY JUSTICE TO MEN OF VARIOUS APTITUDE LEVELS. Showel, Morris. George Washington University, HumRRO. June 1968. 36p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-673-038, price in microfiche $0.65, in hard copy $3.00.

To teach cognitive-type material to men of widely differing aptitudes, exploratory work was conducted in military justice, one of the more abstract subjects in basic combat training. Objectives were identified and alternative tape and slide training programs developed--one slow-paced (designed for low-aptitude men), the other fast-paced (for high-aptitude men). The programs differed most in speed of presentation and amount of repetition. One group of trainees attended the slow program, and a comparable group, the fast program; both groups were made up of trainees with a similar distribution of AFQT scores. Both groups were tested immediately after the class to measure recall and again four weeks later for retention. A comparable group of trainees was tested before attending any classes to measure entry-level knowledge. Men at all levels of aptitude learned from the programs and tended to remember what they had learned. The programs did not have differential effectiveness for men of different aptitudes. Whatever their aptitude, the trainees who took the fast program were more favorable to it than trainees who took the slow program were toward it.

200. A STUDY TO DETERMINE HOW TELELECTURE AND REMOTE BLACKBOARD EQUIPMENT AFFECTS THE TEACHING-LEARNING SITUATION. Mocker, Donald W. January 1967. 16p. Available from Extension Education Department, University of Missouri, St. Louis 63121.

The purpose of this study was to determine how television equipment (remote blackboards, classroom projector screens, and a two way audio telelecture unit) can help the University of Missouri play a fuller role in the community and convert nonproductive hours spent in travel into productive hours spent in additional teaching and research. A traditional evening class control group, a live evening lecture group in St. Louis, and a remote lecture group were used. No significant differences were found among the groups on posttest scores, student reaction, or student attitudes toward the teacher or the format of the course.

3200 Educational Television

201. RESEARCH IN INSTRUCTIONAL TELEVISION AND FILM. Reid, J. Christopher and McLennan, Donald W. U.S. Office of Education, Washington, D.C. 1967. U.S.Government Printing Office, Washington, D.C. 20402, Order Number OE-34041, $1.25.

Abstracts of 350 experiments in instructional television and instructional film since 1950.

202. THE IMPACT OF TELEVISION, METHODS AND FINDINGS IN PROGRAM RESEARCH. Belson, W.A. 1967. Available from Archon Books, The Shoe String Press, Inc., 60 Connelly Parkway, Hamden, Connecticut 06514.

Survey and testing techniques used by the British Broadcasting Corporation in the years 1952-63 indicate methodology for future planning research to answer the question--what people are watching and listening--BBC used the method of having members of a national sample complete diaries. The question of how comprehensible are program materials was answered by bringing subjects to a test center, showing them a sample program, and testing comprehension with specific written questions. What learning and attitude change result from viewing was determined by matching, with the "stable correlate technique", viewers and nonviewers of a program and giving them written tests. Questions on the social impact of viewing were answered

by interviewing regular viewers and nonviewers. References and a bibliography are given.

203. BROADCAST TV AS AN AID TO CONTINUING EDUCATION. TERMINAL PROGRESS REPORT. Merrill, Irving R. and Yaryan, Ruby B. California University, San Francisco Medical Center. The National Heart Institute. June 1968. 42p. EDRS Order Number ED 027 447, price in microfiche $0.25, in hard copy $2.20.

The effect of massed versus distributed television presentations on attendance and learning in a voluntary situation were compared in a field experiment involving 114 physicians in general practice. Physicians viewed videotape presentations in a local hospital over a period of four weeks, with three one hour sessions (distributed viewing) and a single three hour session (massed viewing). On the fifth week they completed a learning achievement test over televised instruction. Attendence was significantly greater under massed than under distributed viewing, especially when the sessions took place in the evening rather than the morning. The presentations produced gains in learning achievement, and there was no significant difference in learning between massed and distributed viewing.

204. OPEN CIRCUIT TELEVISION AND THE COMMUNITY COLLEGE. Long Beach College, California. [1968]. 8p. EDRS Order Number ED 025 249, price in microfiche $0.25, in hard copy $0.50.

This report describes the setting, implementation, and findings of an experiment in educational telecasting 17 one-hour lectures, a course for college credit in lower division health education. Over 2,000 students enrolled and an estimated 32,000 adults viewed the program each week. Findings included: (1) 72% were over 30; (2) 10% were under 21; (3) almost half completed the course; (4) 10% of those completing were teachers, 30% were homemakers, 24% in full-time employment, and 70% married. The course reached an entirely different segment of the population from the typical junior college class, and the many visual aids not ordinarily used in classrooms accounted for the effectiveness of the course. It was estimated that the college received over $200,000 worth of publicity in the form of promotional advertising time as a concomitant of the series.

205. "OPERATION GAP-STOP". Mendelsohn, Harold and others. In Television Quarterly v7 n3 p39-52 Summer 1968.

Operation Gap-Stop was designed to test the efficiency of television in transmitting helpful information about day to day living to urban poor in public housing in Denver. A family serial was created which incorporated everyday problems of the target audience; and as far as possible, members of the ethnic minorities were cast as actors. Commercials stressing community services were inserted. The program was aired on an educational channel at noon and was aimed at a female audience. About 19% of those surveyed watched one or more of the programs but there was a substantial secondary audience of children, friends, and neighbors.

205a THE CREATION AND DEVELOPMENT OF EDUCATIONAL TELEVISION AS AN INSTITUTION OF ADULT EDUCATION. A CASE STUDY IN AMERICAN HISTORY. Carlson, Robert Andrew. Wisconsin University. Ph.D.Thesis. 1968. 562p. University Microfilms Order Number 68-7092, price in microfilm $7.15, in Xerography $25.45.

This historical study analyzes the national development of educational television within the context of American political, social, economic and intellectual life of the 1950's and 1960's.

3400 CURRICULUM MATERIALS

206. DESIGN OF INSTRUCTION. TRAINING INFORMATION PAPER, 1. Jones, Sheila. British Department of Employment and Productivity, London (England). 1968. 31p. Available from H. M. Stationery Office, London, England (S.O. Code No. 36-326-1, 2s9d).

Research in psycholinguistics has included studies of the effect of sequences of words and operations within an instruction; effects of instruction and self-instruction on performance; and the presentation of complex interrelated rules such as those found in legal documents and instructional manuals. Simple declarative sentences are easier to understand than more complex grammatical forms. Moreover, verbal economy appears less important than unambiguous and explicit instruction. In considering the actual choice of words, it is important to know the verbal preferences ("self-instructions") of those who must carry out an instruction. For sequential instructions in a single sentence, important items of information should be placed at the beginning or end of the instruction. For giving complex instructions, visual graphs or "trees" and simple statements that proceed from generalities to specifics are better than continuous prose.

207. CONTINUING EDUCATION FILM SURVEY, A NATIONAL SURVEY OF 16MM FILMS PREPARED FOR THE 1968 NYAPSAE ANNUAL CONFERENCE. Campbell, Boyd P. and Williams, Harold A. New York State University, Albany. 1968. 23p. EDRS Order Number ED 019 615, price in microfiche $0.25, in hard copy $1.25.

The New York Association for Public School Adult Education sent a nationwide questionnaire to learn what adult education films have been developed in recent years for administration, public relations, and interpretation of adult education, for the inservice training of teachers and adults, and as adult education curriculum aids. The annotated list of 162 16millimeter films covers the above categories, and includes films in the areas of citizenship, vocational education, family life, personal development, and general education. The sources, length, and subject matter of the films are indicated.

See also: 281 development of computer aided math and reading programs for adult basic education; 289 survey of library services for functionally illiterate.

3500 INSTRUCTIONAL DEVICES

208. TEACHING MACHINE STUDY. FINAL REPORT. EVCO, Albuquerque, New Mexico. 13 January 1967. 42p. EDRS Order Number ED 019 004, price in microfiche $0.25, in hard copy $2.20.

In an investigation of teaching machines in the Job Corps mathematics program, existing Job Corps arithmetic material was prepared for instruction by machine and programed text, and field tested revisions were made. In the initial test, the teaching machines were greatly preferred to the programed text and showed slightly higher achievement gains. Improvements preceding the second field test included a revision of the text, improvement of the administrative aspects of the system, addition of remedial tutoring, and development of a new type of student response format for programed texts. This new format gave immediate peek-proof student feedback, immediate diagnostic feedback to the instructor, and could be used directly as input data for item-analysis. The second field test showed the learner-oriented programed text to be more effective than the teaching machines available. No compelling data suggested the wide-spread adoption of these machines in conservation centers.

209. AN INVESTIGATION OF THE EFFECTIVENESS OF TRAINING DEVICES WITH VARYING DEGREES OF FIDELITY. Grunwald, Walter. Oklahoma University. Ph.D.Thesis. 1968. 173p. University Microfilms Order Number 68-13,559, price in microfilm $3.00, in Xerography $8.00.

A study was made of five training devices with varying degrees of fidelity in the learning of a psychomotor task in which manipulative skill was not vital. The hypothesis was: an increase in fidelity may not produce a corresponding increase in effectiveness, whereas ability to engage a learner in meaningful physical and mental interaction may be more important than mere resemblance to the real equipment. Five homogeneous groups of Air Force students were randomly assigned to training with either the actual equipment, a functional simulator device, a partly functional mock-up, a full-sized photograph, or a small illustration of the equipment. All groups received identical instruction through a programed text and a tape recording. Results significantly favored the partly functional mock-up and suggested that the effectiveness of training devices may decrease when fidelity is increased beyond a certain optimum value. A model of this relationship was developed.

210. MAINTENANCE TRAINING MEDIA, AN ANNOTATED BIBLIOGRAPHY. Valverde, Horace H. Areospace Medical Research Laboratories, Wright Patterson AFB, Ohio. 1968. 109p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-673-371, price in microfiche $0.65, in hard copy $3.00.

The annotated bibliography contains 200 references to government sponsored training media research and development reports from 1950 through 1966. Each reference bears a DDC Accession Document (AD) number. Representative training media requirements, training aids (including graphics, motion pictures, and general aids), trainers (electromechanical aids), and teaching machines are described.

211. THE IMPORTANCE OF TRAINING REQUIREMENTS INFORMATION IN THE DESIGN AND USE OF AVIATION TRAINING DEVICES. Prophet, Wallace W. George Washington University, Washington, D.C. December 1966. 11p. Available from George Washington University, Human Resources Research Office, 300 North Washington Street, Alexandria, Virginia, 22134. Paper presented at the Flight Safety Foundation 16th Annual International Air Safety Seminar, Athens, Greece, November 1963.

Research is reported on determining the value of present synthetic flight training and developing programs of instruction to make optimum use of available devices used in army helicopter training. It was concluded that beneficial training can be accomplished in cruder devices that may lack in physical fidelity, but have sufficient task fidelity for successful transfer of training. Training devices should be constructed after analysis of training requirements, based upon psychological rather than engineering needs; and synthetic training programs should be tested for effectiveness, and provide an effective means of reinforcing infrequently occurring behaviors.

See also: 132 educational technology in technical training; 157 use of instructional aids in British College of the Sea; 196 abstracts on audiovisual theory and aids in industrial training; 200 telelecture and remote blackboard in university program; 275 learning laboratories in adult basic education; 281 computer aided instruction in adult basic education; 435 training programmers for time sharing computers.

3600 LEARNING FACILITIES

See: 2300 RESIDENTIAL EDUCATION

3800 PERSONNEL AND STAFFING

212. SOME ASPECTS OF TEACHER AND LEADER TRAINING AND RECRUITMENT FOR HIGHER ADULT EDUCATION. Hackel, Alan S. Ohio State University, Columbus, Division of Continuing Education. February 1968. 40p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). EDRS Order Number ED 018 759, price in microfiche $0.25, in hard copy $2.10.

A synthesis of the current literature related to the topic of teachers and leader training and recruitment. The personnel problem in higher adult education is examined from the standpoint of the growth of the field, personnel needs, the need for training, the aims of specialist training at this level, and present practices in training and recruitment. Implications for training of the various philosophies of adult education are examined as well as existing professional preparation and internship programs. Finally, there is a section dealing with conclusions and recommendations. The document includes 25 references.

213. A TEACHER RESOURCE ALLOCATION DECISION MAKING PROCEDURE FOR AN EVENING INSTRUCTIONAL PROGRAM OF A CALIFORNIA PUBLIC JUNIOR COLLEGE. Tayloe, Ralph Chester. California University, Los Angeles. Ed.D.Thesis. 1967. 129p. University Microfilms Order Number 67-11,708, price in microfilm $3.00, in Xerography $6.20.

A study was made of the cyclical sequence and detailed events needed to allocate teacher resources to evening division courses at a California public junior college. Using data from interviews, a flow chart model was made of the allocation procedure. Sequential activities were described as a part of one of three major segments of the total process: determining foundation courses; assigning resources to such courses; and controlling course enrollment. Findings: (1) foundation courses receive the teacher resources, and are generally the same as courses offered in the last similar semester; (2) foundation courses grow by adding specialized courses or new sections; (3) average relative instructor cost per student was 20.66 mills after six low enrollment classes were cancelled; (4) at the end of the six-week enrollment period, 86% of total capacity was in use, effective cost averaged 24 mills, and departmental costs ranged from 17.75 to 45.87 mills per student hour for each dollar of instructor cost.

214. A STUDY OF PART-TIME INSTRUCTORS IN VOCATIONAL-TECHNICAL EDUCATION AMONG COMMUNITY COLLEGES IN MICHIGAN. Messerschmidt, Dale Harvey. Michigan State University. Ph.D.Thesis. 1967. 135p. University Microfilms Order Number 68-4191, price in microfilm $3.00, in Xerography $6.40.

To determine the practices used by community colleges in Michigan to recruit, hire, and prepare part-time instructors in vocational education, and to compare attitudes on six selected variables, administrators at twelve colleges were interviewed and the Minnesota Teacher Attitude Inventory and a personal data sheet administered to instructors. Local business and industry were the primary source of part-time instructors. Topics which instructors wanted in inservice education included teaching methods, examination item writing, lesson plan preparation, and the philosophy of the community college. Length of teaching experience and course work in education had an effect on the attitudes of part-time instructors but no effect on the attitudes of full-time instructors; the age at which part-time and full-time instructors started teaching had no effect on instructors' attitude toward students.

215. A STUDY OF SELECTED EMPLOYEE DEVELOPMENT SPECIALISTS IN THE FEDERAL GOVERNMENT; THEIR BACKGROUND AND PERCEPTIONS OF THEIR ROLE AND ORGANIZATIONAL LOCATION. Ackerman, Leonard. George Washington University, Washington, D.C. Ed.D.Thesis. 1967. 158p. University Microfilms Order Number 68-5520, price in microfilm $3.00, in Xerography $7.40.

The purpose of this study was (1) to analyze perceptions of Employee Development Specialists in the Federal Government concerning their present versus their ideal role and their present place in the organization versus their rightful place; and (2) to compare their background with that of personnel specialists in the Federal Government. The employee Development Specialists, relative to the other group, had more education; were more active in professional societies; identified more with their agency and work group than with the personnel field; showed more educational interest and course enrollments; and were more concerned with teaching techniques, individual and group behavior, and current management theories than with procedural matters. Role descriptions by Employee Development Specialists were quite varied. It was recommended that the Civil Service Commission develop a meaningful role description for Employee Development Specialists, establish educational and experiential standards directly related to the demands of the role, and resolve the apparent conflict between these specialists and the personnel specialists.

216. THE QUALIFICATIONS AND EDUCATIONAL NEEDS OF INDUSTRIAL TRAINING DIRECTORS. Gossage, Loyce Clyde. California University, Los Angeles. Ed.D.Thesis. 1967. 383p. University Microfilms Order Number 67-14,261, price in microfilm $4.90, in Xerography $17.35.

This study investigated the hypothesis that industrial training directors perform educational duties for which they lack appropriate, organized instruction. Questionnaires were sent to 778 principal training directors, of whom 238 responded. Data were obtained on sizes of firms represented, numbers of trainees served, employment standards for training directors, job titles of training directors and their immediate superiors, employment experience and training and development background, subordinate staff, major duties, educational background, self-perceived educational needs, and the educational and work background which the respondents considered desirable for their successors. Only a third had master's degrees in business or education. Assessing present and proposed training activities and coordinating company training were named as the most important duties. Respondents tended to believe that certain duties could be learned only on the job; however, the greater the number of trainees, the more likely a respondent was to prefer that his successor have an advanced degree.

217. PROCEDURES FOR THE SUPERVISION AND EVALUATION OF NEW PART-TIME EVENING-DIVISION INSTRUCTORS IN CALIFORNIA JUNIOR COLLEGES. Heinberg, Sylvester. University of Southern California, Los Angeles. Ed.D.Thesis. 1967. 311p. University Microfilms Order Number 67-405, price in microfilm $4.00, in Xerography $14.20.

This study analyzed inservice programs by California junior colleges for training part-time staff members of evening divisions. In the 63 reporting colleges, 66.9% of evening division staffs were part-time; and evening directors had responsibility for supervising and evaluating them. All but two of the directors had master's degrees; only 14 had doctorates. The majority of directors had taught or administered in junior colleges; 30% had been department heads. The majority of colleges were making wide use of recommended screening, selection, and orientation procedures, but few practiced recommended supervisory and evaluative procedures. Recommendations include adequate released time and funds for department heads to supervise new part-time instructors; control of the growth of evening divisions; joint responsibility by the evening director and the vice-president for staff supervision; and minimum criteria of education and administrative experience for selecting future evening division directors.

218. AN ANALYSIS OF THE ASSOCIATION OF SELECTED FACTORS TO JOB PERFORMANCE OF COOPERATIVE EXTENSION AREA-SPECIALISTS. Woeste, John Theodore. Wisconsin University. Ph.D. Thesis. 1967. 329p. University Microfilms Order Number 67-6846, price in microfilm $4.25, in Xerography $14.85.

The job performance of area-specialists and county agents in Kentucky and Indiana Cooperative Extension Services was measured; and relationships between their job performance and personal and organizational variables were identified. Data were collected by 350 self-reported work samplings per respondent during one week cycle, and by interviews. Relationships were not found between methods of financing area-specialist work and their job performance; the number of relationships prescribed and the percentage of time spent in internal organizational contacts; the type of job stipulated in prescribed organizational relationships and staff coordination index value; and area-specialists' field of specialization and job performance. Among conclusions were: a need exists for greater understanding of the duties of the field staff; insufficient contact exists between area specialists and county agents; specialization in decision making exists in extension organizations; professional personnel spend a large percentage of time performing routine tasks; and clientele can be involved in financing of area specialists work.

See also: 89, 100 counselors in California junior colleges.

3900 Staff Training

See: 0900 ACADEMIC STUDY; 4000 TEACHERS, LEADERS, CHANGE AGENTS; 4100 ADMINISTRATORS; 183 sensitivity training of YMCA staff; 191 training of housewives for teaching adult basic education; 288 short-term training of nonprofessionals for teaching adult basic education; 310 extension inservice training in India; 411 education about credit for teachers of agriculture; 417 training extension agents in interviewing.

4000 Teachers, Leaders, Change Agents

219. EDUCATION OF DEVELOPMENT TECHNICIANS; A GUIDE TO TRAINING PROGRAMS. Trail, Thomas F. 1968. 200p. Available from Frederick A. Praeger, Publishers, 111 Fourth Avenue, New York, New York 10003.

Based on a survey of 150 training syllabuses and interviews with training specialists, this study concentrated on training conducted in the United States for development technicians in government, voluntary, business, university, and religious agencies immediately before or soon after the technicians begin work overseas.

220. A CONTENT ANALYSIS OF THE FIRST NATIONAL CONFERENCE ON ADULT JEWISH EDUCATION. Feinstein, Sara. Columbia University. Ed.D.Thesis. 1967. 352p. University Microfilms Order Number 68-5533, price in microfilm $4.50, in Xerography $16.00.

Based on a set of propositions for maintaining individual group culture, this study examined the outlook of adult Jewish education practitioners. A limited survey revealed needs and problems, and a national conference was convened to discuss the findings. Tape-recorded statements by speakers and participants were subjected to content analysis and a classification system for these data was constructed. It was concluded that the practitioners tend to be aware of individual participant needs and do not hold a single-minded attitude on transmission of the cultural heritage. Knowledge as a single variable was far less dominant than expected. A strong tendency to emphasize content was greatly modified by the tendency to use knowledge to increase identification and commitment. There was less emphasis on the function of adult Jewish education in a pluralistic society.

221. THE RELATIONSHIP BETWEEN DOGMATISM AND PERFORMANCE AS MEASURES OF PROBLEM-SOLVING ABILITY AMONG PROFESSIONAL ADULT EDUCATORS (COUNTY EXTENSION AGENTS). Funk, C.

Dennis and Carter, G. J., Jr. February 1968. 29p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968.) EDRS Order Number ED 017 850, price in microfiche $0.25, in hard copy $1.55.

To determine the relationship between dogmatism and performance as measures of problem solving ability in extension agents, a study was made of agents and supervisors in five states. Agents responded to mailed questionnaires and their supervisors returned performance ratings. Open-mindedness was measured on the Rokeach Dogmatism Scale and performance by ratings by the supervisors using the Lawshe Kephart Personnel Comparison System. An inverse relationship between dogmatism and performance was indicated. It was most strongly associated with middle-aged agents, and those with less than a Master's degree. A slight positive relationship was shown between age and dogmatism, and a strong negative association between level of education and dogmatism. Analysis also suggested that agents low in dogmatism were rated higher in performance than agents high in dogmatism regardless of the degree of dogmatism of the supervisor.

222. A STUDY OF ROLE PERCEPTION AND PERFORMANCE AMONG AGRICULTURAL EXTENSION PERSONNEL IN NOVA SCOTIA. Morehouse, Ralph Ernest. British Columbia University, Vancouver. M.S.Thesis. April 1968. 141p.

The roles of agricultural extension workers are examined and an attempt made to identify the various activities of the workers, to find out who determines their programs, and whether they are meeting their objectives. Agricultural representatives and subject matter specialists base their programs on needs they and groups of farmers identify, while home economics representatives tend to determine their own programs. The agricultural representatives want programs based on needs in their area; the subject matter specialists favor province-wide programs. These representatives and specialists deal mainly with high-income farmers, and rate inservice training above further education; the home economists with low-income farmers and non-farm groups rate inservice training and further education equally. The favorable aspects of the job are seen as: job security, freedom in program planning, job satisfaction, and prestige. Administration policies, night meetings, and lack of opportunity to specialize, appear on the debit side. The workers want to increase their activities in public relations, program evaluation, and program planning. They view farm visits, individual attention, and demonstrations as the most effective methods of communication; and commercial sources, newspapers, telephone calls, and circular letters as the least effective.

223. IDENTIFICATION OF PROFESSIONAL TRAINING NEEDS OF AGRICULTURAL EXTENSION AGENTS IN WESTERN NIGERIA AS A BASIS FOR DEVELOPING A COLLEGE TRAINING CURRICULUM. Williams, Saudiq Kolawole Taiwo. Cornell University. Ph.D.Thesis. 1967. 185p. University Microfilms Order Number 67-3797, price in microfilm $3.00, in Xerography $8.40.

This study identified professional training needs of extension agents in Western Nigeria as the basis for a curriculum at the college level. Behaviors extracted from critical incidents represented 95 behavioral elements which were classified into five categories: creating appropriate teaching learning situations; planning, organizing and implementing extension programs; demonstrating interpersonal relationships in extension and outside agencies; working with groups of clientele; and organizing training programs for co-workers and clientele. It was found that extension agents require training in specific aspects of the extension educational process, behavioral sciences and agricultural technology.

224. COMMUNICATION CONCEPTS FOR ADULT EDUCATORS. Pletsch, Douglas H. February 1969. 15p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969).

The methodology used in the study of communication concepts by the adult educator in agriculture is explained, to develop more effective training programs. Four stages clarify procedural aspects of the study: (1) determination of anticipated

behavioral requirements for future competence in communication of social change, through assessment of technical and economic trends in society; (2) identification of communication concepts by reviewing literature and a screening process; (3) definition of most important concepts; (4) suggestion of educational objectives useful in increasing competency in communication. Twelve intellectual behavior requirements for adult agricultural educators, and 31 concept groupings are listed, including an example of the concept "persuasion". General objectives to provide a basis for more specific teaching objectives and learning experiences are listed and an illustration given.

225. AN IDENTIFICATION OF CRITICAL BEHAVIOR AND RELATED MAJOR CONCEPTS RELEVANT TO THE TRAINING OF PROFESSIONAL LEADERS IN EXTENSION EDUCATION. Findlay, E. Weldon. February 1969. 21p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 025 720, price in microfiche $0.25, in hard copy $1.15.

A study was made of Cooperative Extension Service workers in New York State to identify curriculum content for training leaders in extension education. The critical incident method was used to discover behavior patterns characteristic of extension agents. A structure of concepts was identified and linked to behavioral categories. Key behavior was grouped within seven major categories; preconditioned or set behavior; programing ; mobilizing resources and facilitating action; coordinating action and activities; providing voluntary leadership; influencing clientele evaluation and adoption of innovations; and regulating programs and activities. Concepts were identified under the headings of the system and its development, planning change, managing change, and influencing the evaluation and adoption of innovations.

226. THE ROLE OF EXTENSION AGENT-FARM MANAGEMENT IN VIRGINIA AS PERCEIVED BY EXTENSION AGENTS-AGRICULTURE. Scyphers, Evans Reece, Jr. Virginia Polytechnic Institute, Blacksburg. M.S.Thesis. May 1967. 111p.

This study, in Virginia, investigated the role of the Extension Agent-Farm Management (EAFM) as perceived by themselves and Extension Agents-Agriculture (EAA). The central hypothesis (there is no significant difference in role perception) was accepted because only 4 of 28 activities examined showed any significant differences in the way the two groups rated present and suggested priority. Respondents felt that more assistance should be given by the EAFMs in 22 of the 28 activities examined. It is evident that the EAFMs must change their present performance if role expectations of these agents are to be fulfilled.

227. THE ROLE OF THE DISTRICT EXTENSION HOME ECONOMIST IN KANSAS. Schroeder, Mary Doris. Kansas State University. M.S.Thesis. 1968. 101p. Available from Library, Kansas State University, Manhattan, Kansas 66504.

The role of the district extension home economist was studied by collecting role perceptions from the home economics personnel in the Kansas Cooperative Extension Service. Questionnaires collected from county extension economists, district home economists, and district extension supervisors,rated importance "given" and "ideally should be given" to fifteen functions of the district extension home economists. Some agreement among the three respondent groups existed with the five most important functions being: (1) keeping up to date, (2) training agents, (3) coordinating county work with specialists, (4) programing, and (5) counseling on professional problems. There was high agreement between emphasis that should be given and that was being given to functions as perceived by respondent groups, with the district extension home economists least satisfied. They felt more emphasis should be given to keeping up to date and evaluating staff performance. Age, experience, completion of an extension education course or induction training , and degree of urbanization of the county seemed to be important factors in the ranking process.

228. A STUDY OF PROGRAM LEADERSHIP AMONG EXTENSION SPECIALISTS DIRECTED TOWARD LEARNING WHAT FACTORS AUGMENT AND DETER LEADERSHIP EXPRESSION. Michaelsen, Leon Claude. Cornell University. Ed.D.Thesis. 1957. 170p. University Microfilms Order Number 67-13,920, price in microfilm $3.00, in Xerography $7.80.

To identify factors which facilitate leadership expression in rural extension specialists, questionnaires were sent to specialists in ten states who devoted 50% or more of their time to extension work in production, management, and resource use, and marketing. Evaluations were secured from supervisors and agents familiar with the specialists' work. Results included the following: (1) specialists aged 45-55 exercised more leadership than older or younger specialists; (2) those supervised by extension personnel exercised more leadership than those supervised by university department personnel; (3) specialists exercised greater leadership if they thought that such leadership was regarded favorably by administrators, would be accepted by others, and received supportive feedback from important others in their professional world; (4) despite the importance of leadership in most position descriptions, leadership tended to be deemphasized by tradition, operating procedures, and official attitudes.

229. A CRITICAL INCIDENT STUDY OF THE PROFESSIONAL ADULT EDUCATOR (EXTENSION AGRICULTURAL AGENT). Kohl, Fred E. and Carter, G. L., Jr. 1968. 20p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). EDRS Order Number ED 017 863, price in microfiche $0.25, in hard copy $1.10.

The critical incident technique was used to determine job requirements of Idaho agricultural agents. Job requirements were developed by categorizing the critical behaviors in five major areas--group development, program development, counseling clients, interpersonal relations, and maintaining the organization. Social skills were used more than technical skills in critical areas of the job. Agents felt less effective in social situations when they did not initiate action. They depended on individual contacts for getting results and worked through available social systems. Specialized agents felt they were more effective, found their job more satisfying, and worked more closely with public agencies than generalized agents. Agents with high grade point averages saw more of their actions as critical, devoted more time to program planning, and were more effective in counseling clients. High supervisory ratings were given to agents who worked primarily with adult clientele in traditional agricultural areas.

230. COMMUNICATION CONCEPTS FOR DEVELOPING INCREASED COMPETENCE AMONG COOPERATIVE EXTENSION AND VOCATIONAL AGRICULTURAL EDUCATORS IN IMPLEMENTING EDUCATIONAL CHANGE. Final Report. McCormick, Robert W. and others. Ohio State University. U.S. Office of Education, Washington. Bureau of Research. February 1968. 105p. EDRS Order Number ED 018 770, price in microfiche $0.50, in hard copy $5.35.

The study identified major communication concepts needed by adult educators in agriculture. Concepts were identified from the literature and from communication specialists. Twenty-seven concepts, classified as most important, were applied through situational analysis of critical incidents of adult educators in agriculture. This process identified the relevance of the concept to the intellectual behavior requirements of the change agent. In addition, the relation of the major concept to other communication concepts was described and the concept was defined. Suggested educational objectives were identified for educational programs for adult educators.

231. ACCEPTANCE AND IMPLEMENTATION OF THE FOUR-H PROJECT LEADER SYSTEM BY THE IOWA COUNTY EXTENSION STAFF. Fink, Varlyn David. Iowa State University. M.S.Thesis. May 1967. 103p. Available from Photoduplication Service, Iowa State University Library, Ames, Iowa 50010.

The county extension field staff in Iowa were studied to determine the extent they

(1) understood the purpose and procedure of the 4-H project leader system, (2) considered the project leader system of value to the total 4-H program. (3) would plan to implement the project leader system in the next two years, and (4) desired assistance with implementing the system.

232. TRAINING AS PERCEIVED BY FOUR-H LEADERS. Johnson, Jimmy P. and Sollie, Carleton R. 7p. In Journal of Cooperative Extension v6 n3 p164-70 Fall 1968.

A 25% random sample of volunteer adult 4-H leaders in Mississippi were asked to rank 25 training needs in order of importance. The top two needs chosen were obtaining and keeping parent cooperation and gaining information concerning awards. The importance leaders placed on these training needs was further examined in relation to three respondent characteristics: (1) number of training sessions attended, (2) number of years as a leader, and (3) race. A different ranking of needs resulted from each examination.

233. THE PERSONALITY OF 4-H LEADERS. Alexander, Frank D. In Journal of Cooperative Extension v7 n2 p104-14 Summer 1969.

Personality characteristics were assessed for first year voluntary 4-H leaders in New York State. Male and female leaders were compared to their counterparts in the general public as well as to each other. Differences existed in 10 of the 16 personality traits between the sexes. It is questioned whether some traits are desirable in models for youth, especially those of leaders who scored in extreme degrees in the traits of conventional, aloof, glum, dependent, lax, submissive, sensitive, and tense.

See also: 0900 ACADEMIC STUDY; 3820 PERSONNEL POLICIES AND PRACTICES; 105 extension agents' views on farm policies; 109 leadership styles of community developers; 286, 287, 288 background, needs, training of teachers in adult basic education; 309 role of foreign community development technicians; 314 Canadian volunteers in Jamaica; 334 biographical data on lecturers in senior war colleges; 371 industrial trainers in Florida; 453, 454, 456, 457 various nonprofessionals in home and parent education.

4100 Administrators

234. THE FUNCTIONS AND PREPARATIONAL NEEDS OF DIRECTORS OF HOSPITAL EDUCATION. Hole, Floyd Marvin. Arizona State University. Ed.D.Thesis. 1968. 223p. University Microfilms Order Number 68-15,001, price in microfilm $3.00, in Xerography $10.15.

To determine the functions and the preparational needs of directors of hospital education, to identify problems encountered by these directors, to propose educational recommendations, and to improve preparational programs, training directors responded to a questionnaire containing statements of functions and competency. Functions were ranked by importance in the following ten operational areas: organizational; program purposes; program development; instructional services; student personnel services; staff personnel; facilities; business management; program evaluation; and research. To ascertain the knowledge needed, competency statements were similarly ranked. Major problems were seen in financial support, programs, staff, facilities, equipment and materials, student personnel services, organization, and research.

235. LEADER BEHAVIOR AND ITS RELATION TO INNOVATIVENESS OF COUNTY EXTENSION CHAIRMEN. Mehta, Ratan Chand. Ohio State University. Ph.D.Thesis. 1967. 141p. University Microfilms Order Number 68-3027, price in microfilm $3.00, in Xerography $6.80.

To analyze the leader behavior of the county extension agent chairmen in Ohio and relate it to their adoption of programming innovations, sixty chairmen who

had occupied that position for three or more years in the same county constituted the respondent group. The paired comparison technique was used for ranking degree of innovativeness, and the Forced-choice Leader Behavior Description Questionnaire to categorize leader behavior dimensions of "initiating structure" and "consideration". Agent chairmen with above average leadership on the "initiating structure" and "consideration" dimensions were more innovative. Age, amount of formal education, tenure, number of dependents, participation in in-service workshops, and recency of assuming the position of Chairman were not significantly related to innovativeness. Recent participation in graduate courses, and self-perceived role as innovator were positively correlated with innovation.

236. THE ADMINISTRATIVE FUNCTIONS OF THE COUNTY EXTENSION DIRECTOR IN KANSAS. Van Meter, Earl Leroy. Kansas State University. M.S.Thesis. 1968. 100p. EDRS Order Number ED 028 337, price in microfiche $0.50, in hard copy $5.10.

To clarify the administrative functions of the Kansas county extension director, respondents (all county directors, professional co-workers, extension council executive board members, and selected state extension administrators) indicated how important they perceived selected administrative duties to be by scoring them on a five point scale. There was more agreement among the respondents on the administrative functions of the county extension director than was anticipated. The age variable showed more relationship to the ranking of importance than did any other; sex was the next most important.

237. AN ANALYSIS OF THE EXPRESSED TRAINING NEEDS OF THE COUNTY EXTENSION DIRECTOR IN KANSAS. Van Meter, E. L. June 1968. 60p.

County extension directors, agents, executive board members and state extension administrators indicated areas of training they felt were most important in contributing to effectiveness of the county extension director. Nine training needs were ranked in the following order: (1) extension organization and administration, (2) program planning and development, (3) communications, (4) effective thinking, (5) technical knowledge, (6) human development, (7) the educational process, (8) social systems, and (9) research. The rank order varied among respondents, but all agreed that organization and administration was the most important area. Executive board members and county directors placed heavy emphasis on technical knowledge, and county extension agents, on program planning and communication. Older extension agents placed more importance on technical knowledge than younger agents. The state administrators only placed the educational process high in the ranking.

238. CORRELATES OF ADMINISTRATIVE PROFESSIONAL LEADERSHIP IN THE NORTH CAROLINA AGRICULTURAL EXTENSION SERVICE. Shearon, Ronald W. February 1969. 28p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 025 729, price in microfiche $0.25, in hard copy $1.50.

This study analyzed variance in county extension chairmen's (CEC) conformity to an administrative performance leadership (APL) concept of their role. Relationships between APL and agent morale and performance, CEC attributes, and CEC relationships with agents, were assessed. Results were reexamined after adjusting for effects of sex, level of education, tenure, and career satisfaction. Major findings were: (1) CEC conformity to an APL role concept appeared related to agent morale and performance; (2) chairmen who considered the APL concept very important had higher APL scores; (3) personal characteristics of agents had essentially no effect on coefficients for measures (managerial support, equality, support in conflict situations) of CEC-agent relationships. Findings suggest that, where they provide agents with managerial support, minimize status distinctions, and support agents in conflict situations, CEC are more likely to negotiate certain obstacles (agent resistance and limited time) and conform more closely to the APL role concept.

See also: 0900 ACADEMIC STUDY; 3820 PERSONNEL POLICIES AND PRACTICES; 95 review of administrative principles; 100 role of evening administrator in California junior colleges; 285 behavior of directors of basic education centers.

4300 EVALUATION

See: 1100 MENTAL PERCEPTUAL ABILITIES: 1160 PSYCHOLOGICAL, PERSONALITY FACTORS; 2600-3200 INSTRUCTIONAL METHODS; 6550 OCCUPATIONAL TRAINING-UNSKILLED DISADVANTAGED; 17 Commentary on evaluation research methods.

4600 EDUCATION OF PARTICULAR GROUPS

4620 Age Groups

See: 1120 MENTAL, PERCEPTUAL ABILITIES: 1200 AGE DIFFERENCES (in learning); 153 programmed instruction with groups under and over 30.

4625 Young Adults

239. WORKER ADJUSTMENT--YOUTH IN TRANSITION FROM SCHOOL TO WORK; AN ANNOTATED BIBLIOGRAPHY OF RECENT LITERATURE. BIBLIOGRAPHY 2. Garbin, A.P. and others. Ohio State University. 1968. 143p. EDRS Order Number ED 021 070, price in microfiche $0.75, in hard copy $7.25.

240. RELATIONSHIPS BETWEEN CERTAIN BACKGROUND FACTORS OF YOUNG ADULTS AND THEIR EXPRESSED ATTITUDES TOWARD SELECTED ETHICAL VALUES. Johnstone, William Milton. University of Pittsburgh. Ph.D.Thesis. 1967. 162p. University Microfilms Order Number 67-12,391, price in microfilm $3.00, in Xerography $7.60.

The relationship between characteristics of young adults such as sex, marital status, parenthood, income level, age, educational background, occupational level, and church participation were studied as to their influence on the ethical values of marital fidelity, honesty, and goodwill. Young adults in Protestant congregations in Western Pennsylvania, responded to a personal data sheet and attitude inventory. Differences were found between single and married adults and sexes in respect to marital fidelity. Goodwill was higher among parents, with church participation having no influence on this value or on honesty. A significant difference existed among occupational groups concerning honesty, with college students having the lowest score. No significant differences were shown between the age groups, 19-27 years, and 28-36, in regard to any ethical values; between married young adults with children and those without, relative to marital fidelity and honesty; between the sexes, with references to honesty; between income level and educational background and attitudes toward all three ethical values.

241. A STUDY OF SELECTED BACKGROUND FACTORS AND THEIR RELATIONSHIP TO PARTICIPATION IN AND ATTITUDES TOWARD PARTICIPATION IN ADULT EDUCATIONAL ACTIVITIES OF YOUNG ADULTS FROM RURAL AREAS. Waldron, Mark Woodsworth. Wisconsin University. Ph.D.Thesis. 1967. 227p. University Microfilms Order Number 68-7137, price in microfilm $6.75, in Xerography $23.85.

This study was made to determine the relationship of characteristics of young adults in rural Wisconsin to their participation in adult education and to their attitudes to such participation. Adult education participation and attitudes proved to be

related to intelligence, academic achievement, level of education, and socio-economic status; while graduation from reorganized districts correlated favorably, but not significantly, with higher participation. Lack of money and the self-impression of not being the studious type were the chief barriers to participation. Interest was strongest in vocational, technical, and business subject areas, and in regular high school and university courses.

See also: 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; 40 longitudinal study of self concept and occupational behavior in young adults; 120 migration of rural youth in Nebraska; 270 relationship of social character and dogmatism among Spanish American young adults; 231, 232, 233 leaders in 4-H programs.

4630 Middle-Aged

242. THE PRE-RETIREMENT YEARS: A LONGITUDINAL STUDY OF THE LABOR MARKET OF THE COHORT OF MEN 45-59 YEARS OF AGE. VOL. I. Parnes, Herbert S. and others. Ohio State University. October 1968. 303p. EDRS Order Number 026 525, price in microfiche $1.25, in hard copy $15.25.

Part of the National Longitudinal Surveys which will also examine the labor market experience over a 5-year period, this first report analyzes a large number of economic, social, and psychological variables. It seeks to describe and explain variations in the labor market position of the males who were between the ages of 45-59 at the time of the initial interview in mid 1966. Data were derived from personal interviews with a multi-stage probability sample of 5,043 males in the civilian noninstitutional population. Some conclusions were: (1) There is hardly a dimension of labor market behavior in which black men and white men do not differ, although these differences disappear in some cases when occupation is controlled, and (2) The presence of health problems is related to low labor force participation, high unemployment, low commitment to work, high propensity to retire, low rates of pay and relatively more dissatisfaction with current job.

243. INDUSTRIAL POLICIES AND PRACTICES IN THE EMPLOYMENT OF RETIRED MILITARY PERSONNEL. Jensen, Alvin Carl. George Washington University, Washington, D.C. Ed.D.Thesis. 1967. 246p. University Microfilms Order Number 67-15,932, price in microfilm $3.20, in Xerography $11.25.

A study was made of the policies and practices of 750 of the largest United States Corporations in employing retired military personnel. Age, education, and military experience was examined. Findings indicated: (1) industry lacks separate policies on employment of military retirees; (2) military rank played no significant role in the employment of military retirees; (3) industries did not actively recruit military retirees but would welcome applicants; (4) the largest number of job openings were in the middle Atlantic and north central states; (5) excessive starting salary sought was the reason most often given for not hiring; (6) college education was preferred for professional jobs and high school education for the skills and trades; (7) retirement benefits were available to all employees with two to 15 years' service; (8) a need exists to translate military job and school experience into usuable and needed civilian equivalents.

244. AN ANALYSIS OF THE ARMY OFFICER STUDENT. Fullerton, Leroy Robert. George Washington University, Washington, D.C. Ed.D.Thesis. 1967. 155p. University Microfilms Order Number 67-15,930, price in microfilm $3.00, in Xerography $7.20.

This study evaluated higher education in establishing a second career for retired Army officers. Primary sources of data were Army officer students and recently

retired officers. These were among the conclusions: (1) high response to the survey showed interest in higher education; (2) 94% of students and 68% of retirees have baccalaureate degrees; (3) most students are seeking master's and doctoral degrees; (4) advancement in rank is correlated with educational attainment; (5) military schooling for students, based on rank and longevity, is very high; (6) academic education and professional education are closely interrelated; (7) reported incomes of retirees are over $10,000 for the majority; (8) direct application, service friends, resumes, and contacts on the job were used by retirees to find positions; (9) counseling service is inadequate; (10) there are opportunities in the Army for virtually every career officer to continue; (11) satisfaction, challenge, and prestige rank with financial considerations in the choice of new careers; (12) restrictions imposed by the Dual Compensation Act have a damaging effect.

See also: 480 review of studies of middle age as basis for religious education programs.

4635 Older Adults

245. EDUCATION FOR AGING. Current Information Sources, Number 14. ERIC Clearinghouse on Adult Education. February 1968. 20p. EDRS Order Number ED 019 564, price in microfiche $0.25, in hard copy $1.10.

This bibliography of recent (1964-67) annotations and abstracts is divided into sections relating to the characteristics and learning abilities of older adults, training programs, and retirement and preretirement education.

246. THE EDUCATIONAL INTERESTS AND NEEDS OF OLDER ADULTS IN SELECTED PRESBYTERIAN CHURCHES. Mills, Beatrice Marie. Ed.D.Thesis. 1968. 232p. University Microfilms Order Number 68-17,282, price in microfilm $3.00, in Xerography $10.60.

The study attempted to identify educational needs of Presbyterian church members over 65 years, to discover how ministers identify these interests and needs, and to suggest implications for Christian religious education. Of the adults, 30% identified an educational need, most commonly Bible study, discussion groups on current events and needs of older persons, group singing, and seeing a play in the church. Of the ministers 59% tried to identify the needs of older adults, most frequently through personal inquiry. The ministers perceived the educational interests of older adults to include recreation and hobbies, Bible study, a theology of aging and retirement, and training in group discussion methods. It was concluded that older adults need to understand the concept of developmental tasks as it relates to later life, to improve verbal communication skills, and to cultivate an increased awareness of the necessity of thoughtfulness and respect for diversity within the church.

247. POST-RETIREMENT ACTIVITY AND ADJUSTMENT TO OCCUPATIONAL RETIREMENT; A RE-EXAMINATION WITHIN A FRAMEWORK OF ROLE AND SELF THEORY. Janovy, David Lee. Nebraska University. Ph.D.Thesis. 1967. 242p. University Microfilms.Order Number 67-10,665, price in microfilm $3.15, in Xerography $11.05.

In this study of the relationship between activity after retirement and personal adjustment to occupational retirement, the importance of activity was seen as dependent on perceptions of the retirement role and on self-concepts. Subjects were divided into two categroies: those who viewed retirement in terms of work-related values; and those who viewed retirement in terms of leisure. It was predicted that good adjustment would be highly related to "instrumental-service" activity in the former group, and to "expressive-pleasure" activity in the latter group. The theoretical position received moderate support.

248. THE RELATIONSHIP OF WORK VALUES TO SATISFACTION WITH RETIREMENT AND FUTURE TIME PERSPECTIVE. Halpern, Doryan. Columbia University, New York. Ph.D.Thesis. 1967. University Microfilms Order Number 67-14,049, price in microfilm $3.00, in Xerography $4.80.

This study tested two hypotheses: (1) the importance attached to the intrinsic aspects of work is negatively related to retirement satisfaction, maximum extension of future time perspective (FTP), and the number of events anticipated in the future; (2) retirement satisfaction is positively related to FTP maximum length and events anticipated. Subjects were 65 white male retirees whose physical and mental health appeared normal and whose retirement income was adequate. Findings supported the first hypothesis but not the second.

249. JOB REDESIGN FOR OLDER WORKERS: PILOT STUDY AND SURVEY IN EIGHT MEMBER COUNTRIES. Marbech, G. Social Affairs Division, Organisation for Economic Co-operation and Development, Paris, (France). 1968. 71p. Available from OECD Publications Center, Suite 1305, 1750 Pennsylvania Avenue, Northwest, Washington D.C. 20006, ($1.20).

A survey of the member states of the Organisation for Economic Cooperation and Development (OECD) revealed many examples of job redesign. Job redesign should consider physical exertion, postural and static work demands, dusty or humid atmosphere, loss of manual dexterity, and loss of visual acuity in the aging worker's situation. Compensation for these problems can include mechanization or automation, sitting position, modification of work rate, protection from environmental stress, less reliance on only one sense, and minimum training to readjust to new skills. The sparsity of answers to the OECD questionnaire shows lack of concern for the older worker.

250. EVALUATION OF WORK EXPERIENCE AND TRAINING OF OLDER WORKERS. A REPORT PREPARED FOR THE NATIONAL COUNCIL ON THE AGING. Somers, Gerald G. Wisconsin University. Industrial Relations Research Institute. 1967. 84p.

Because their age makes older persons (50+) questionable investment risks, the author here considers methods in cost-benefit analysis of the Work Experience and Training Program of the Economic Opportunity Act. He discusses obstacles to training welfare recipients, points up need for fuller treatment of the relationship of income incentives to training, outlines characteristics of public assistance trainees, and shows that vocational rehabilitation costs more than the imparting of new skills. He points out faults in cost analysis such as lack of control groups and absence of adequate data. For construction of a cost-benefit model of older worker participation better information is needed on (1) universe which might be served, (2) cost for particular aspects of the program, (3) periods of employment and unemployment and specific income for periods prior to, during, and after participation, and (4) length of time in program. Appendix shows methodology of Ford Foundation Project.

251. A LONGITUDINAL STUDY OF PRERETIREMENT EDUCATION. Hunter, Woodrow W. Michigan University. Welfare Administration, Washington, D.C. (DHEW). 1968. 128p. EDRS Order Number ED 024 869, price in microfiche $0.75, in hard copy $6.50.

In a longitudinal study of preretirement education, one of two groups had a group discussion program for 10 weekly sessions. Volunteer participants were male, hourly-rated workers, 60-68 years old, employed in the Detroit area automobile assembly plants. Discussion centered on work and retirement, money management, physical and mental health, living arrangements, relationships with family and friends, legal issues, free time, and community programs. Data were collected by interviews with all subjects before retirement, six to 12 months, and 18 to 24 months after retirement. The preretirement education reduced retirement dissatisfaction and health worries, and encouraged participation in activities with family and friends.

252. THE OLDER ADULT AS A UNIVERSITY STUDENT. Kauffman, Earl. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969. 1969. 31p. EDRS Order Number ED 025 732, price in microfiche $0.25, in hard copy $1.65.

Characteristics and performance of Donovan Scholars (56 men and 127 women over 65) at the University of Kentucky were studied. Findings include: (1) most Scholars were high school graduates with at least some college; (2) most grades were fair to excellent; (3) English, art, history, education, and philosophy were the most popular courses; (4) Donovans were comparable to regular students on five personality measures and significantly different on eight others; (5) Donovan Scholars were more conforming and conservative than younger students, with much more commitment to religious values; (6) on the whole, they were very well accepted by professors.

See also: 1100 MENTAL, PERCEPTUAL ABILITIES; 1200 AGE DIFFERENCES (in learning); 135 discovery method for retraining older workers; 161 discussion in pre-retirement education; 429 trainability tests for older workers.

4655 Education of Women

253. PROBLEMS OF ADMINISTRATIVE CHANGE IN SELECTED PROGRAMS FOR THE REEDUCATION OF WOMEN. Addis, Margaret Emily. Harvard University. Ed.D.Thesis. 1967. 325p. University Microfilms Order Number 67-9845, price in microfilm $4.20, in Xerography $14.65.

Nine educational institutions were studied through visits and interviews to find out their problems in the creation of programs for the reeducation of women. Though no problems were common to all, they were in the five major areas of resources, curriculum and instruction, administrative attitudes, faculty reactions, and student diversity, characteristics, and impact on undergraduates. Problems which could be inferred included personnel, objectives and expectations, and procedural techniques. A lack of sustained interest in the program at the initiating level seemed a reliable predictor of subsequent problems and it appeared that execution of plans should remain with those who did the original planning.

254. IDENTITY DIFFUSION AS A FUNCTION OF SEX-ROLES IN ADULT WOMEN. Jabury, Donald Eugene. Michigan State University. Ph.D.Thesis. 1967. 137p. University Microfilms Order Number 68-7905, price in microfilm $3.00, in Xerography $6.60.

255. THE SOCIAL ROLES OF MARRIED MIDDLE-AGED WOMEN WITH IMPLICATIONS FOR ADULT EDUCATION. Canaday, Martha Helen. Ed.D.Thesis. 1966. 116p. University Microfilms Order Number 67-5900, price in microfilm $3.00, in Xerography $5.80.

A questionnaire was completed by parents and prospective students to assess women's role performance in four areas-wife, homemaker, mother, and individual person. The wife and homemaker roles were most easily perceived by all family members. The mother role was next and the individual-person score was lowest. There was essentially no difference in the feelings of satisfaction for the women's role performance among the respondents. The only intra-family agreement score which showed a significant relationship to demographic factors was between the wife-husband role satisfaction score and the husband's occupation. The consistently low scores in the individual-person role suggested that in the years devoted to family care these women neglected developing personal interests. Adult education programs could make a significant contribution by orienting programs to the needs of women in this age group.

256. INTERESTS AND INFORMATION SOURCES OF TIOGA COUNTY HOMEMAKERS. EXTENSION STUDIES

NO. 38. Brown, Emory J. and others. Pennsylvania State University. September 1968. 12p. EDRS Order Number ED 024 873, price in microfiche $0.25, in hard copy $0.70.

In telephone interviews with housewives in Tioga County, Pennsylvania, it was found that 28% of the women kept record books of income and expenses, 40% preferred a store, 34% a bank loan for credit sources, 22% planned household repairs, or remodeling with the coming year, and 84% were not planning to buy any appliances or furnishings in the coming year. Participation in Extension activities, and watching television programs, attending meetings, and reading newspaper articles were generally low, with mothers of children under 21 most active. They were most interested in education and careers for their children, interior decorating, and dieting, and showed a slight interest in attending meetings on these subjects; women with more education, children under 21, and white collar or skilled laborer husbands had more interests. Newsletters and newspapers were favored means of gaining information.

257. THE NEED FOR ADULT EDUCATION OF MARRIED WOMEN IN THE LOWER SOCIO-ECONOMIC LEVELS IN VANCOUVER. Webster, Daisy. British Columbia University, Vancouver. M.A.Thesis. May 1968. 104p. EDRS Order Number ED 026 569, price in microfiche $0.50, in hard copy $5.30.

A study was made of the educational needs of married women of lower socioeconomic status in three inner city areas of Vancouver. Reasons for nonparticipation in adult education were also sought. The majority were married, aged 15-44, with one to four children. Most had gone beyond Grade 8, but only 1/3 had completed high school. Most of the participants in continuing education were high school graduates. Tuition fees, lack of child care facilities, transportation costs, feelings of academic inadequacy, and fear of institutionalized programs were major reasons for nonparticipation. A conflict of priorities appeared between needs perceived by resource personnel and needs perceived by the respondents. Resource persons stressed organizational objectives; most of the women stressed education for future employment. Both groups saw needs in the areas of cultural orientation, family relationships, nutrition and home management, citizenship and employment. Program success requires that these married women share in planning, and that their priorities be reflected in the curriculum.

258. DIFFERENTIAL INTEREST CHARACTERISTICS OF CAREER WOMEN. Schissell, Robert Frances. Nebraska University. 1967. 152p. University Microfilms Order Number 67-15,992, price in microfilm $3.00, in Xerography $7.40.

A study was made of career orientation differences between 200 career women and 200 noncareer women. The two groups appeared to lie along a bipolar interest continuum of "things" versus "people", with career women toward the pole of "things" and noncareer women toward that of "people".

259. CHARACTERISTICS, PERCEPTIONS, AND EXPERIENCES OF MARRIED WOMEN STUDENTS AT LANSING COMMUNITY COLLEGE 1965. Hunt, Beverly English. Michigan State University. Ed.D. Thesis. 1967. 152p. University Microfilms Order Number 67-7551, price in microfilm $3.00, in Xerography $7.20.

To describe married women students at Lansing Community College, their reasons for going to college, problems faced, and perceptions of attitudes of family and friends toward the dual role of student and homemaker, data were gathered through questionnaires, interviews, and official records. About 25% of women students were married. Of the married students, 70% were part time and 68% were over 25. Marriage and lack of money were the major reasons given for not continuing their education. Women with children were not postponing education until the children were grown. Married students surpassed single ones on grade point averages. Further educational and/or vocational goals predominated. Time was the main problem cited.

Friends and families were generally encouraging; husbands (especially those with some college) and mothers of students were most so. The amount of education in the families of younger women was greater than for older women. Felt needs included more counseling services, day classes in longer blocks of time, and more parking and child care facilities.

260. ATTITUDES AND CHARACTERISTICS OF THE ADULT COED AT SELECTED UNIVERSITIES. Lantz, Joanne. American Personnel and Guidance Association, Washington, D.C. April 1968. 7p. Speech presented at the American Personnel and Guidance Association Convention, Detroit, Michigan, April 7-11, 1968. EDRS Order Number ED 022 211, price in microfiche $0.25, in hard copy $0.45.

A random sample of all women 25 years of age or older, enrolled for the fall 1966 semester at three mid-western universities, were mailed the Adult Coed Attitude Inventory. The inventory gathered information on age, marital status, employment, extracurricular activities, families and family attitudes toward the return of the women to school, school services found to be helpful, academic programs, financial status, and potential employment. The last part of the questionnaire was a projective design to assess how the subjects viewed themsleves and their role, and how they compared themselves with other women.

261 SPECIAL REPORT ON WOMEN AND GRADUATE STUDY. Taylor, Jean Anne M. U.S.Department of Health, Education, and Welfare, Washington, D.C. 1968. 101p. United States Printing Office ($.75).

262. JUNIOR COLLEGE: AN ATTRACTION TO WOMEN. Shoulders, Betty. 1968. 20p. EDRS Order Number ED 023 373, price in microfiche $0.25, in hard copy $1.10.

Questionnaires were sent to selected women over 22 years old at two small-town and two metropolitan colleges. The replies showed: (1) motives were the same in large or small towns, (2) motives did differ according to age, (3) most women aspired to a bachelor's degree. (4) of the small-town women, 64% wanted to teach, while only 19% of the metropolitan women were interested in teaching ,19% in business or secretarial courses, and the rest in miscellaneous fields, and (5) 64% from small towns and 75% from larger cities planned on full-time employment. The study includes comments by the respondents on their difficulties in resuming their education, their perceptions of the junior college , and their personal feelings.

263. EDUCATIONAL RETRAINING REQUIREMENTS OF THE OLDER FEMALE LABOR POOL RETURNEE. Kaufman, Charles Wesley. Arizona University Ed.D.Thesis. 1967. 358p. University Microfilms Order Number 67-12,209, price in microfilm $4.60, in Xerography $16.20.

A questionnaire and interview survey of employer needs showed favorable attitudes toward employing mature females and provided a list of occupations available presently and five years hence. Results of a similar investigation of mature women's needs and attitudes included the following: (1) the majority were interested in returning to work; (2) occupation desired varied directly with community social status; (3) monetary need was the prime motive at all levels, but at higher social levels boredom was also an important factor; (4) higher social groups were already well trained and need only retraining, while lower groups need complete vocational training. Data on mature women were analyzed by a five-category socioeconomic scale.

264. IMPLICATIONS OF WOMEN'S WORK PATTERNS FOR VOCATIONAL AND TECHNICAL EDUCATION. AN ANNOTATED BIBLIOGRAPHY. BIBLIOGRAPHY SERIES. No.1. Lee, Sylvia L. and others. Ohio State University. October 1967. 37p. Available from Center for Vocational and Technical Education, Ohio State University, 980 Kinnear Road, Columbus, Ohio 43212.

This annotated bibliography focuses on the educational implications of women's labor force participation. Entries are organized in eight sections: Status of

Women; Education of Women for Employment; Labor Force Participation; Legislation Pertaining to Women in the Labor Force; Vocational Guidance; Research; Bibliographies; and Presentation Appropriate for Students and the Lay Public.

265. WOMEN'S WORK: ECONOMIC GROWTH, IDEOLOGY, STRUCTURE. Wilensky, Harold L. 14p. In Industrial Relations; v7 n3 p235-48 May 1968.

An analysis of 34 nations classified by feminist ideology (strongly or less strongly egalitarian), per capita income, and job opportunities for women revealed that nonagricultural labor force participation by women in the richest countries varies somewhat by ideology but that the most industricalized countries have the highest rates. Despite women in many career areas in the United States, the Soviet Union, and elsewhere, it is still rare in any industrial nation to find women in positions of great authority. Women are increasingly motivated to work but, because of long weekly schedules and ambivalent feelings, they tend to seek shorter, more flexible hours and to enter traditionally feminine fields. Barring radical changes in family and economic life, the traditional division of labor by sex will persist along with slowly rising labor force participation by women.

266. PATTERNS OF FEMALE LABOR FORCE ACTIVITY. McNally, Gertrude B. 15p. In Industrial Relations v7 n3 p204-18 May 1968.

Labor force participation by women, especially married and mature (ages 45-64) women, has increased greatly since 1947. Job opportunities have shifted markedly from blue collar to white collar, and the proportion of women with some independent income has risen by half. Prosperity and high income bring increases in the female labor force, partly in accordance with such variables as age, race, family status, education, husband's income, availability of jobs employing women, and possible earnings. Women are still gaining in numbers in the labor force, mainly in professional, managerial, sales, service, clerical, and light industrial occupations where they are already well established. Studies of income differentials between men and women within occupations, and action under Title VII of the Civil Rights Act, suggest that job discrimination by sex is still a serious problem.

See also: 7000 HOME, FAMILY, PARENT EDUCATION; 41, 42 relation of re-creation to ego stage development in women graduate students; 49 attitudes toward women working; 162 group methods with mothers of disadvantaged pre-school children; 191 training of housewives for teaching in adult basic education; 416 interests, information sources and adoption in farm families; 484 biography of Amanda Labarca, educator to the women of Chile.

4680 Education of Men

267. MEN-IN-TRANSITION, A STUDY OF ADULT MALE UNDERGRADUATES AT WAYNE STATE UNIVERSITY, 1967. Schlossberg, Nancy K. Wayne State University. 1967. 47p. EDRS Order Number ED 023 014, price in microfiche $0.25, in hard Copy $2.45.

Data were collected by means of (1) a questionnaire returned by male students 35 and over enrolled as undergraduates; (2) group interviews with eight men which explored the reasons for change and stresses involved; and (3) a discussion between two panels of eight men of the role of counselors and educators in working with adults. The adult male returning to college is about 40, a part-time student working for a degree, probably in liberal arts or, if not that, in education or business administration. Reassessment of academic requirements to encourage college attendance by adults is needed. Separate adult counseling centers should be established.

4700 Aptitude Groups

4710 Low Aptitude

268. THE DEVELOPMENT AND EVALUATION OF TRAINING METHODS FOR GROUP IV PERSONNEL. 1. ORIENTATION AND IMPLEMENTATION OF THE TRAINING METHODS DEVELOPMENT SCHOOL (TMDS). Steinemann, John H. U.S. Naval Personnel Research Activity, San Diego, California. October 1968. 26p. Clearinghouse for Federal Scientific and Technical Information, Order Number AD-679-174, price in microfiche $0.65, in hard copy $3.00.

As part of continuing Navy research on the Trainability of Group IV (low ability) personnel, an experimental Training Methods Development School (TMDS) was initiated, with research controls, for evaluating alternative training content and methods for such personnel. Trainees, representing the complete range of Group IV scores, were taught soldering, gauge and dial reading, basic hand tools, electronic equipment, practical mathematics, despite limitations in verbal and mathematical abilities. Successful training of marginal personnel appears to involve minimizing reliance on aptitudes known to be limited, and capitalizing on other important aptitudinal and experimental variables.

See also: 4750-4870 DISADVANTAGED GROUPS; 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; 199 automated programs for teaching military justice to low and high aptitude men.

4730 High Aptitude

See: 31 follow-up of Terman gifted group; 46 personality characteristics of very bright adults (Mensa members).

4750 Disadvantaged Groups

4760 Economic Disadvantagement-General

269. RURAL POVERTY: INCIDENCE, CAUSES AND CURES. Tweeten, Luther G. Oklahoma State University. National Science Foundation, Washington, D.C. July 1968. 106p. EDRS Order Number ED 022 596, price in microfiche $0.50, in hard copy $5.40.

This research was conducted to investigate the following four aspects of rural poverty; (1) the dimensions of rural poverty; (2) description of past public programs to raise incomes of the disadvantaged; (3) an outline of the strengths and weaknesses of past programs; and (4) discussion of priorities for efforts to alleviate poverty. Special attention was given to the interaction between economic and social-psychological factors in the discussion of the causes of poverty; conventional theories of poverty were discussed; and A General Theory of Economic Stagnation was presented.

See also: 5230 ADULT BASIC EDUCATION; 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED: 7000 HOME, FAMILY, PARENT EDUCATION: 117 bibliography on Appalachia; 118 background information on Presbyterians in Appalachia; 119 regional approach to war on poverty in rural Texas; 125 urban education bibliography; 205 television in education of urban poor; 307 legal services to poor in New Haven.

4800 Negro

See: 5230 ADULT BASIC EDUCATION: 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; 7000 HOME, FAMILY, PARENT EDUCATION; 242 labor market differences in behavior by race.

4825 Spanish Speaking

270. THE RELATIONSHIP OF SOCIAL CHARACTER AND DOGMATISM AMONG SPANISH AMERICAN YOUNG ADULTS IN THREE SELECTED INSTITUTIONS IN NEW MEXICO. Orr, Rodney Gerry. New Mexico State University. Ed.D.Thesis. 1967. 166p. University Microfilms Order Number 67-11,763 , price in microfilm $3.00, in Xerography $7.80.

The purpose of this study was to investigate the social character of Spanish American young adults enrolled in job training courses. The sample consisted of eighteen to twenty-four year olds in a rural vocational educational institution, a metropolitan technical vocational institution, and an Office of Economic Opportunity neighborhood improvement project (large town and small town) sponsored by a university. There were some pronounced differences in social character but not dogmatism among the young adults; there was a slight tendency toward inner-directedness in social character and a definite tendency toward closed-mindedness in dogmatism. No significant changes occurred in the social character or dogmatism of a sample after a two month basic education orientation course.

See also: 5230 ADULT BASIC EDUCATION: 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; 7000 HOME, FAMILY, PARENT EDUCATION.

4850 American Indians

271. EMPLOYABILITY FACTORS AND NEEDS OF WISCONSIN TRIBAL INDIANS. Wisconsin State Employment Service, Madison. 1968. 43p. EDRS Order Number ED 021 684, price in microfiche $0.25, in hard copy $2.25.

General characteristics of Wisconsin tribal Indians as they relate to employment factors and needs are outlined. Surveys yielded information pertaining to: residence; employment statistics; primary occupations; industrial employment; educational level and school status; educational level and income; marital status; education and training desires; and mobility.

272. SELECTED FACTORS ASSOCIATED WITH THE PARTICIPATION OF ADULT OJIBWAY INDIANS IN FORMAL VOLUNTARY ORGANIZATIONS. Hannin, Daniel. Wisconsin University. Ph.D.Thesis. 1967. 218p. University Microfilms Order Number 67-954, price in microfilm $3.00, in Xerography $9.90.

This study covered characteristics, organizational objectives, sponsorship, formal meeting procedures, value concepts, and other factors associated with participation in voluntary organizations by adult Ojibway Indians in Ontario. Subject centered interview questions, and real life Indian situations phrased in the third person were used. Findings included the following: (1) respondents of both sexes, aged 41 to 50, married, and having five to eight years of schooling, formed the main group of participants; (2) adults from households engaged in seasonal labor, who did not attend adult education courses or church regularly, tended not to participate in voluntary organizations; (3) participants considered adult education activities the most important of the organizational objectives, while nonparticipants also stressed religious activities; and (4) attitudes toward formal meeting procedures, change, planning, education, time, and secondary relationships in organizations were significantly related to participation.

See also: 139 leadership styles in Neighborhood Youth Corps; 283 problems of teaching English to American Indians; 393 evaluation of vocational training program for Indians.

4870 Migrant Workers

273. DOMESTIC MIGRATORY FARMWORKERS PERSONAL AND ECONOMIC CHARACTERISTICS. Rapton, Avra and others. U.S.Department of Agriculture, Washington, D.C. September 1967. 36p. EDRS Order Number ED 019 175, price in microfiche $0.25, in hard copy $1.90.

Work experience, personal characteristics, trends, and contrasts of migratory farmworkers in the United States are presented for the years 1962 through 1966 with emphasis on 1965.

5000 Mental Disability

274. THE PREDICTIVE ASSESSMENT OF THE ADULT RETARDED FOR SOCIAL AND VOCATIONAL ADJUSTMENT: A REVIEW OF RESEARCH. PART 1, ANNOTATED BIBLIOGRAPHY. Cobb, Henry V. and others. South Dakota University. 1966. 161p. EDRS Order Number ED 014 171, price in microfiche $0.75, in hard copy $8.15.

See also: 159 group discussion with educable mental retardates.

5200 PROGRAM AREAS

5230 Adult Basic Education

275. ADULT BASIC EDUCATION, NEW YORK STATE: A TWO YEAR STUDY, 1965-67. New York State Education Department, Albany Bureau of Basic Continuing Education. 1968. 76p. EDRS Order Number ED 027 463, price in microfiche $0.50, in hard copy $3.90.

The New York State adult basic education program was studied to ascertain whether the target population was being reached, compare effectiveness of programs; estimate time needed by individuals to attain literacy, learn if sociological and physical variables affect academic growth, and determine operating costs. Data were obtained from registration and test forms, including two forms of the Stanford Achievement Test. Results included: (1) students receiving programed instruction only had the best attendance; (2) the three special learning laboratories held were successful as demonstration centers; (3) enrollments at the 0-4 reading levels showed that the target population is being reached; (4) age, class level, attendance, and a schedule of 6-9 class hours weekly correlated significantly with reading achievement, but sex did not; (5) 80.2% of operating costs were directly related to instruction.

276. AN ANALYSIS OF ADULT BASIC EDUCATION IN MISSOURI. Kirk, William Donald. Arkansas University. Ed.D.Thesis. 1968. 106p. University Microfilms Order Number 68-9665 price in microfilm $3.00, in Xerography $5.40.

A study was made of the expenditure of Federal funds in Missouri schools, agencies in adult basic education programs according to such factors as school size, assessed valuation, classification, and geographical location; and major characteristics of the adult students. The 44 institutions during the 1966-67 fiscal year had 4,266 enrollees, and 750 students received their eighth-grade diplomas. Of the enrollees, 31% were aged 36-50; 57% were female; 62% white; 62% married; 36%

heads of households; 50% employed, either full time or part time; 56% earned under $2,000 a year; 25% of the enrollees' families earned under $2,000 a year; 68% resided in urban areas; 93% had less than a Grade 6 education; 51% were enrolled in Grades 7 and 8; and 63% gave "self-improvement" as their reason for participation. The high dropout rate was a major problem.

277. A DESCRIPTION AND ANALYSIS OF SELECTED CHARACTERISTICS IN ADULT BASIC EDUCATION IN HILLSBOROUGH COUNTY, FLORIDA. Dutton, Marion Donnie. Florida State University. Ph.D.Thesis. December 1967. 183p. University Microfilms. (Available soon).

To identify the characteristics associated with participants in a stipend versus a nonstipend adult basic education program in Florida and with alienation, data were obtained by a questionnaire and the alienation scale. Of the 101 independent variables, 55 were significantly related to type of participation and 19 to degree of alienation. Findings supported the following conclusions; (1) participants in the stipend program differ significantly from those in the other program; (2) adult basic education participants showing a high degree of alienation differ significantly from those showing little alienation; (3) low income, undereducated students have problems but do not make extensive use of agencies available for solving these problems; and (4) the students learn about adult classes from many sources.

278. AN INVESTIGATION OF ADULT NEGRO ILLITERACY; PREDICTION OF READING ACHIEVEMENT AND DESCRIPTION OF EDUCATIONAL CHARACTERISTICS OF A SAMPLE OF CITY CORE ADULT NEGRO ILLITERATES. Berke, Norman Daniel. Ed.D.Thesis. 1967. 153p. University Microfilms Order Number 67-11,507 , price in microfilm $3.00, in Xerography $7.20.

A study was made of variables predicting reading achievement in adult Negro illiterates and of educational characteristics of 42 such adults in the Buffalo inner city. Subjects were tested with the Wechsler Adult Intelligence Scale (WAIS). the Leiter Adult Intelligence Scale (LAIS), the David-Eells Games (DE), and an Experience Inventory (EI). After 200 hours of instruction, each subject was given a form of the Stanford Achievement Tests in Reading (Primary Level). Findings included: (1) reading gains correlated significantly with EI Functional Knowledge, DE Probabilities, EI Utilitarian Books, and DE Analogies; (2) tests for illiterate adults should be visually simple, with uncomplicated directions, several samples for each series of items, and no time limit; (3) all subjects showed ineffective visual and auditory discrimination skills; (4) higher achievers came from smaller families, and from families where there was reading; (5) a greater percentage of achievers' mothers and sisters could read than could those of low achievers; (6) reading comprehension level was not a good indication of reading potential.

279. FURTHER VALIDATION OF THE OHIO LITERACY TEST: CORRELATION WITH THE WECHSLER ADULT INTELLIGENCE SCALE AND GRADE ACHIEVED IN SCHOOL. Zung, William W. K. and Gianturco, Judith. 2p. In Journal of Clinical Psychology v24 n2 April 1968.

To test the Ohio Literacy Test's (OLT) correlation with the Wechsler Adult Intelligence Scale (WAIS), the scores of 493 patients who had received both tests at Veterans Administration Hospital were studied. The OLT scores do not correlate significantly with age, and correlate highest with the WAIS Verbal IQ, indicating that the OLT is a reliable and rapid means of estimating verbal intelligence.

280. READING DIAGNOSIS AND REMEDIATION. Strang , Ruth. Indiana University. ERIC Clearinhouse on Reading; International Reading Association, Newark, Delaware. Office of Education (DHEW) Washington, D.C. Bureau of Research. 1968. 204p. EDRS Order Number ED 025 402, price in microfiche $1.00, hard copy not available from EDRS.

This monograph includes an extensive review and evaluation of the research literature and offers teachers and clinicians background for understanding reading diag-

nosis, the correlates and causes of reading disabilities, diagnostic techniques, and remediation.

281. THE DEVELOPMENT OF PRE-VOCATIONAL EDUCATION LITERACY COURSES FOR USE WITH COMPUTER-ASSISTED INSTRUCTION OF DISADVANTAGED YOUTHS AND ADULTS. FINAL REPORT. Hankin, Edward K. and others. Florida State University. June 1967. 179p. EDRS Order Number ED 024 763, price in microfiche $0.75, in hard copy $9.05.

The purpose of this project was to develop computer assisted courses in arithmetic and reading for disadvantaged adults and youths to serve as prerequisites to entering vocational training. Because of budgetary cuts, the project was terminated before its completion. Lessons in counting, addition, and subtraction were written and tested. The pilot tests showed the arithmetic lessons to be effective. The findings showed that, in general, computer assisted instruction can be used in pre-vocational literacy training for disadvantaged youths and adults.

282. A LITERACY PROGRAM FOR ADULT CITY CORE ILLITERATES: AN INVESTIGATION OF EXPERIENTIAL FACTORS...; THE DEVELOPMENT OF AN INSTRUMENT TO PREDICT SUCCESS...; AND A STUDY OF THE INITIAL TEACHING ALPHABET... . FINAL REPORT. Brown, Don A. and Newman, Anabel P. U.S.Office of Education, Bureau of Research, Washington, D.C. October 1968. 199p. EDRS Order Number ED 026 619, price in microfiche $1.00, in hard copy $10.05.

This study involving 207 adult city-core illiterates from Buffalo and Niagara Falls, New York, reading below third grade level, examined (a) educational characteristics and abilities of adult illiterates; (b) a study of the use of i.t.a. with adult-centered materials paced to adult learning rates and providing training for teachers; and (c) identification of variables predictive of reading gain. Standardized tests and tests of potential which were used showed the subjects lacking a number of skills helpful to efficient and effective test taking. They usually had a low level of general information, as well as low skills level. Visual acuity was often inadequate. Gains by the experimental group were not significantly greater than those of the control group; however, the child-oriented standardized testing instruments were considered inadequate. A relatively higher level of communication in the background and reading-oriented present family situations were the most valuable predictive variables. Recommendations are included concerning combination research programs, linguistic analysis, recruitment, adult materials, teaching training, readability formula for adults, a materials study, methodology, and testing.

283. THE STUDY OF THE PROBLEMS OF TEACHING ENGLISH TO AMERICAN INDIANS, REPORT AND RECOMMENDATIONS. Ohannessian, Sirarpi. Center for Applied Linguistics, Washington, D.C. July 1967. 46p. EDRS Order Number ED 014 727, price in microfiche $0.25, in hard copy $2.40.

The purpose of the study was to assess the learning and teaching of English in elementary and secondary BIA schools as well as in adult education programs and selected public schools enrolling American Indian students.

284. LITERACY TRAINING AND JOB PLACEMENT OF HARD-CORE UNEMPLOYED NEGROES IN DETROIT. Patten, Thomas H., Jr. and Clark, Gerald E., Jr. 22p. In The Journal of Human Resources v2 n1 p25-36 Winter 1968.

In 1965 a study conducted to test the relative effectiveness of the use of the initial teaching alphabet and traditional orthographic approaches to reading among 53 functionally illiterate, unemployed (largely Negroes) in Detroit, found differences in the appropriateness of the two mediums. A followup study in spring of 1966 was conducted to determine job placement and general social adjustment of the participants; six had obtained jobs and many of the remainder were continuing in the literacy training programs. It was also found that extended joblessness still existed

and achievement of literacy and job placement remain distant goals for the hard-core unemployed.

285. FIELD STUDY OF THE PERCEPTIONS OF DIRECTORS' LEADER BEHAVIOR IN ILLINOIS BASIC EDUCATION CENTERS. Stotts, Michael J. Illinois State Office of the Superintendent of Public Instruction, Springfield. Department of Adult Education. August 1968. 57p. EDRS Order Number ED 027 480, price in microfiche $0.25, in hard copy $2.95.

This statewide study involving 11 adult basic education centers sought information on the behavior of full time directors of adult basic education. The Leader Behavior Description Questionnaire was administered to all teachers and administrators in the centers. Twelve dimensions of leader behavior were measured. On all but three variables, teachers and directors basically agreed on how a director does behave. On directors' self descriptions, mean scores showed ideal leader behavior to be scaled higher than real leader behavior. Significant differences appeared on eight variables when variance was analyzed using the self descriptions. Teacher expectations of directors' leader behavior tested for significance on ten variables. Teachers' standards, then, for leader behavior were consistently higher than teachers' perceptions of the directors' actual leader behavior.

286. THE ADULT BASIC EDUCATION TEACHER IN ONTARIO: HIS BACKGROUND, PROBLEMS, AND NEED FOR CONTINUING PROFESSIONAL EDUCATION. Brooke, W. Michael. University of Toronto, (Ontario). M.A.Thesis. 1968. 120p.

A study explored teacher backgrounds, problems on the job, and the need for continuing education of teachers in Ontario Manpower Retraining Centres. Data were drawn from a questionnaire sent to 110 teachers. Among the findings: the greatest problem was in aiding slow learners and students of differing abilities in the same classroom; the teachers had difficulty locating resource literature and persons; a need was expressed for continuing training in techniques and methodologies. The typical adult basic education teacher entered from the formal school system, was more likely to have a certificate than a degree, had been in the field for less than three years, and teaches English and mathematics to grades 7 and 8 in which he has between 10 and 19 students.

287. THE RESEARCHER'S ROLE IN THE DIFFUSION OF AN INNOVATION: A COMPARATIVE STUDY. Martin, Margaret R. Paper presented at the National Seminar for Adult Education Research (Toronto, February 9-11, 1969). 1969. 13p. EDRS Order Number ED 025 733, price in microfiche $0.25, in hard copy $0.75.

This study used a diffusion model in an attempt to understand the role of the researcher in the evaluation of an educational innovation in a school setting., The Learning Laboratory for Adult Basic Education at the Rochambeau School in White Plains, and the Brevoort Community Center in Bedford-Stuyvesant, Brooklyn, were studied. Both programs used a multimedia basic education system developed by a commercial firm. Agencies and teachers in the two projects appeared to perceive the research coordinator as being ,in addition to a professional in research design and methodology, a communicator in the program planning and teacher training phases, rather than a change agent. Although knowledge level and other factors might contribute to differences in content and objectives, the researcher was expected to transmit efficiently both research and nonresearch information. Teacher training and experience also seemed to affect communication and the adoption of innovation.

288. A MEASUREMENT OF THE EDUCATIONAL RELEVANCE OF A SHORT-TERM TRAINING PROGRAM FOR ADULT LITERACY TEACHERS. FINAL REPORT. Laubach, Robert S. and others. Laubach Literacy, Inc., Syracuse, New York. U.S.Office of Education, Washington, D.C., Bureau of Research. June 1968. 27p. EDRS Order Number ED 027 512, price in micro-

fiche $0.25, in hard copy $1.45.

The study was undertaken to evaluate the relevance of short courses for teachers in literacy programs. Two short courses were organized for nonprofessional ABE teachers. Teachers in each course were divided in half to form an experimental group and a control group. Experimental groups completed an attitude and opinion survey about ABE students after having actually taught ABE students; control groups did not. A multiple-time series design was used to measure change over time since this design permitted the measurement of transition rates which showed shifts among responses when the same adults responded to the same questionnaire item on two different occasions. The study demonstrated that: (1) training programs can be evaluated by studying changes over time of the attitudes of nonprofessional ABE teachers, and (2) the particular training courses were only qualified successes since they did not induce permanent change.

289. PUBLIC LIBRARY SERVICES FOR THE FUNCTIONALLY ILLITERATE; A SURVEY OF PRACTICE. Hiatt, Peter, Ed. and Drennan, Henry, Ed. American Library Association, Chicago, Illinois. 1967. 65p. EDRS Order Number ED 025 266, price in microfiche $0.50, in hard copy $3.35.

This document described projects designed to help public library serve the culturally disadvantaged in general and the functionally illiterate adult specifically. Examples of activities for the functionally illiterate and a list of people actively involved in such programs are given.

290. TEACHING ENGLISH TO SPEAKERS OF OTHER LANGUAGES, UNITED STATES ACTIVITIES--1967. Wineberg, Ruth E., Ed. Center for Applied Linguistics, Washington, D.C. April 1968. 15p. EDRS Order Number ED 018 788, price in microfiche $0.25, in hard copy $0.85.

291. THE TEACHING OF ENGLISH AS A SECOND OR FOREIGN LANGUAGE, BRITISH ACTIVITIES 1967/68. British Council, London (England) April 1968. 15p. EDRS Order Number ED 018 789, price in microfiche $0.25, in hard copy $.85.

See also: 5280 LITERACY TRAINING-FOREIGN; 5550 COMMUNITY DEVELOPMENT PROGRAMS-FOREIGN; 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; 10 Literacy education in the Confederacy, 1861-1865; 75 testing in Project 100,000; 124 nonstandard elements of Central Texas English; 138 experiment on teaching styles in adult basic education; 179 effect of personality factor "sociability" in ABE workshops; 191 training housewives as teachers of ABE; 195 review and bibliography on mass media in adult education; 197 experimental evaluation of Learning 100, a multimedia reading program; 208 investigation of teaching machines and programmed texts in Job Corps math programs; 458 ABE for Head Start parents; 477 literacy in military education since World War I; 473, 474 history of immigrant education in New York City schools.

5280 Literacy Education-Foreign

292. RESEARCH AND EXPERIMENTS IN FUNCTIONAL LITERACY IN INDIA: A SELECTED ANNOTATED BIBLIOGRAPHY. Indian Adult Education Association, New Delhi. 1967. 38p.

In this annotated bibliography are 31 items dealing with educational attitudes, participation, and motivation; instructional media, methods, and materials; volunteer teachers; program planning and finance; educational needs and interests; regional programs; and national and international seminars.

293. THE EFFECT OF LITERACY TRAINING ON MODERNIZATION VARIABLES. Herzog, William Adam,

Jr. Michigan State University. Ph.D.Thesis. 1968. 101p. University Microfilms Order Number 68-7900, price in microfilm $3.00, in Xerography $5.20.

The present research was a field experiment exploring the relationship of literacy to certain modernization variables. Data were collected in five rural communities in Minas Gerais, Brazil. The communities were matched on population, literacy rate, distance to an urban center, community institutional development, and external contact. Four communities were randomly chosen for literacy education programs; the fifth was the control group. Analysis of variance between illiterate enrollees and illiterate nonenrollees in the four treatment communities was based on the variables of empathy, achievement motivation, cosmopolitanism, mass media exposure, and political knowledge. No significant differences were found for either males or females. Hypotheses predicting an association between literacy program enrollment and training and increases in the five variables were not supported.

See also: 5550 COMMUNITY DEVELOPMENT PROGRAMS-FOREIGN, 290, 291 English as second language; 486 bibliography on African adult education.

5400 Adult Higher Education-Academic Programs

294. TRENDS IN ADULT READING. Miller, Justin H. December 1966. 15p. EDRS Order Number ED 015 080, price in microfiche $0.25, in hard copy $0.85.

Trends evident in adult reading during the 1960s in the areas of administration, programs, teaching techniques, research projects, and methods of promotion of reading programs are discussed.

295. CURRENT PRACTICES IN COLLEGE AND ADULT DEVELOPMENTAL READING PROGRAMS. Geerlofs, Marjorie White and Kling, Martin. International Reading Association, Newark, Delaware. In Journal of Reading v11 n7 p517-20, 569-75 April 1968.

See also: 5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; 6200 MANAGEMENT, SUPERVISORY DEVELOPMENT; 7510 COLLEGES AND UNIVERSITIES; 7700 JUNIOR COLLEGES; 74 performance of part-time evening students in Nassau College; 136 instructional techniques for adult students in psychology course; 260 characteristics of adult coed; 261 women in graduate study; 267 male undergraduates at Wayne State; 467 effects of AACSB standards on evening business programs.

5500 Community Services and Programs

296. THE PRESENT STATUS OF THE ANTIGONISH MOVEMENT IN NOVA SCOTIA. Sowder, Ellie Mae. George Peabody College for Teachers, Nashville, Tennessee. Ph.D.Thesis. 1967. 116p. University Microfilms Order Number 67-2898, price in microfilm $3.00, in Xerography $5.80.

A case study is presented of the Antigonish Movement in Nova Scotia. Originally founded to combat poverty and exploitation, it has functioned since 1929 under the extension department of St. Francis Xavier University. The Movement brought education to working people and introduced group learning into adult education. It has had a strong influence in linking adult education with the cooperative movement, and has contributed to leadership training with its emphasis on group action. Primacy of the individual, social reform through education, and fundamental change in social and economic institutions are among its guiding principles. The early study groups and conferences, the "kitchen meetings", neighborhood short courses, leadership short courses, the rise of credit unions and various types of coopera-

tives, and (mainly since 1957) the people's School TV series and the social leadership diploma course at the Coady International Institute represent some major stages, programs, and accomplishments.

297. URBAN AFFAIRS ACTIVITIES SPONSORED BY COLLEGES AND UNIVERSITIES: AN INVENTORY OF CURRICULA, RESEARCH, AND EXTENSION IN THE BALTIMORE REGION. Regional Planning Council, Baltimore, Maryland. Johns Hopkins University. November 1967. 48p. Clearinghouse for Federal Scientific & Technical Information Order Number PB-177-806, price in microfiche $0.65, in hard copy $3.00.

Twenty institutions of higher learning in the Baltimore Region report activities in urban affairs. About 350 activities were reported, including consultative services from Johns Hopkins. Over 100 research projects dealing with urban problems were reported.

298. IMPLEMENTATION OF TITLE I OF THE HIGHER EDUCATION ACT OF 1965 IN TENNESSEE. Welch, Franklin Weldon. Florida State University. Ph.D.Thesis. 1967. 226p. University Microfilms Order Number 68-7804, price in microfilm $3.00, in Xerography $10.35.

The purpose of this study was to analyze the operation of Title I of the Higher Education Act of 1965 in Tennessee. The program followed the state philosophy and the "Regulations". Problems restricting implementation were: the naming of the University of Tennessee as the state agency, the limited function of the advisory council system, state agency emphasis upon research, manpower shortages at institutions and the agency, problems in communication, and inexperience. Significant relationships were found between amount of funds received and planning with persons outside higher education, population density, and number of participants.

299. EXTENSION AND PUBLIC SERVICE IN THE UNIVERSITY OF ILLINOIS. PHASE II REPORT. Illinois University. August 1968. 36p. EDRS Order Number ED 023 347, price in microfiche $0.25, in hard copy $1.90.

Deals with recommendations for expanding extension and public service functions of the University of Illinois. To be effective, the university needs a master plan in which the four essential ingredients must be (1) broad, strong and explicit policy commitments by the top administration and the faculties, (2) the organizational machinery to carry it out, including close cooperation with the faculty, (3) policy and program improvements are essential, especially with regard to harnessing the services of the cooperative extension service for urban needs, and (4) continuous administrative refinement should be made in the light of evaluated experience.

300. COMMUNITY SERVICES OF THE COMMUNITY COLLEGES IN THE STATE OF PENNSYLVANIA. Morton, Paul Wesley. Lehigh University, Bethlehem, Pennsylvania. Ed.D.Thesis. April 1966. 147p. University Microfilms Order Number 66-11,828, price in microfilm $3.00, in Xerography $7.00.

To identify elements of a community service program, to define the scope of a community, and to make recommendations on services in Pennsylvania community colleges, interviews were held with personnel of public two-year colleges in Florida, Michigan, and New York and in Harrisburg, Philadelphia, and Bucks County. Community services were noncredit activities aimed at human resource development and desirable socioeconomic conditions and included seminars, workshops, adult education, and other activities of a cultural, economic, and educational nature. The community served by the college was defined as a relatively limited geographic area. The Pennsylvania colleges in the study were not performing community service to any significant extent but were concerned with college-transfer curriculums and accreditation by the Middle States Association.

301. A MODEL FOR COOPERATIVE EXTENSION PROGRAM DETERMINATION IN COMMUNITY RESOURCE DEVELOPMENT. Preston, James Clarence. Cornell University. Ed.D.Thesis. 1968. 177p. University Microfilms Order Number 68-4635, price in microfilm $3.00, in Xerography $8.20.

A study was made to develop a Cooperative Extension program response determination model for community resource development at the state level. Sub-objectives were to define the concept of community resource development, provide a basis for identifying clients, indicate problems in the public decision sphere, determine the information needed, and identify key elements needed to create a suitable educational program. Key factors included the general nature of public problems; potential clientele; limitations in legislation; the philosophy, objectives, and policies for such a program; requirements of knowledge base, staffing, and funds; and the appropriate organizational structure for program development.

302. A SURVEY OF THE COMMUNITY SERVICE FUNCTION IN SELECTED JUNIOR COLLEGES. Beaudoin, Adrien P. 1968. 8p. EDRS Order Number ED 025 254, price in microfiche $0.25, in hard copy $0.50.

Returns from 53 of 88 junior colleges surveyed concerning their community service programs showed the following: (1) community service functions are typically the responsibility of an executive officer who reports to the president or other college administrator; (2) categories of community service programs are instructional (adult education, non-credit programs, institutes, seminars, workshops, and other short courses), cultural (lectures, concerts, and films), informational (exhibitions, speakers, and public events), and other, (3) the nature of these programs is service to a population not directly served by university-parallel or occupational degree programs.

303. A SURVEY OF COMMUNITY SERVICES IN CALIFORNIA JUNIOR COLLEGE DISTRICTS, 1966-67. Keim, William A. and others. California Junior College Association, Sacramento, California. 1967. 25p. EDRS Order Number ED 018 207, price in microfiche $0.25, in hard copy $1.35.

A 27-item questionnaire was sent to junior colleges in five types of districts to determine the extent of their community services.

304. SELECTED URBAN PROBLEMS AND THE PUBLIC COMMUNITY COLLEGE. Hankin, Joseph Nathan. Columbia University. Ed.D.Thesis. 1967. 271p. University Microfilms Order Number 68-8980, price in microfilm $3.50, in Xerography $12.40.

This study posed some urban problems (housing, employment, and education) affecting junior colleges, and suggested how these colleges might act on the problems and whether, in fact, they were doing so. Questionnaires, interviews, and visits at 21 colleges were used, and correspondence on problems of the 28 largest United States metropolitan areas. The newness of some community colleges, a deluge of student applications, lack of community response, and lack of facilities and/or money were among the reasons for lack of involvement. The author felt that poor overall planning and conservative attitudes were also an inhibiting factor. Recommendations pertained to employing personnel for long range planning, institutional research, and other purposes, and to such matters as community oriented program planning and placement, developmental education, parent education, and use of college facilities by deprived groups.

305. SOCIAL INTERACTION AND PERSONAL AND SOCIAL CHARACTERISTICS OF THE MEMBERS OF AN AREA DEVELOPMENT LEADERSHIP GROUP. Lind, Marvin Burdett. Iowa State University. Ph.D.Thesis. 1967. 166p. University Microfilms Order Number 68-5962, price in microfilm $3.00, in Xerography $7.80.

The orientation, interaction and characteristcs of an area development leadership

group in Iowa were analyzed. Objectives were to determine the extent of communication of selected social system elements by the state staff to the leadership group; perceptions of leadership members' role; members' attitudes on institutional changes and on the effect the group would have on the outcome of the activity; the systematic linkage represented by members and member characteristics as compared with those of power actors in other Iowa studies. Knowledge of stated goals and objectives and area socioeconomic conditions, views on leadership group roles, and beliefs about institutional changes and the impact of the leadership group were similar for the area group and state staff members. Influence was significantly related to group members' organizational participation and their contacts throughout the area.

306. CIVIL DEFENSE ADULT EDUCATION, A CASE STUDY OF AN EXPERIMENTAL PILOT PROGRAM IN FLORIDA. Culbertson, Millicent Kicklighter. Florida State University. Ed.D. Thesis. 1967. 198p. University Microfilms Order Number 68-345, price in microfilm $3.00, in Xerography $9.00.

A study of the Florida Pilot Program in Civil Defense Adult Education was conducted from the viewpoint of a participant observer and from data from official records. An instrument to gauge the extent to which the objectives of the program were achieved was sent to the 66 counties. Replies were received from 56. Some of the implications of the success of the program were the increase of interest and action in survival plans, requests by adults for the Civil Defense Class, discussions of civil defense, motivation to learn about civil defense, emphasis on teaching civil defense at the elementary and secondary school level.

307. RESEARCH REPORT ON DIXWELL LEGAL RIGHTS ASSOCIATION, NEW HAVEN, CONNECTICUT, SUMMER, 1967. Hunter, David E. 1967. 29p. EDRS Order Number ED 023 001, price in microfiche $0.25, in hard copy $1.55.

A 1967 study of the Dixwell Legal Rights Association, New Haven, Connecticut, assessed the goals of the DLRA (training of legal service agency personnel and of nonprofessional neighborhood workers, legal rights education of the poor, social change) and their realization. DLRA services were highly respected. Its militancy had produced results unattained by other organizations, and of all the legal and social agencies it was most in contact with the ghetto poor. Perhaps its greatest contribution to ghetto self-help was the example of its workers--undereducated ghetto residents actively promoting their own and their neighbors' rights. A vital function was to remedy problems arising from existing institutional structures. Successes were attributed to direct financing, small size, and the use of ghetto residents.

See also: 2210 COMMUNITY EDUCATION AND DEVELOPMENT; 2230 RURAL COMMUNITIES; 2240 URBAN ENVIRONMENT; 4650-4870 DISADVANTAGED GROUPS; 5550 COMMUNITY DEVELOPMENT PROGRAMS-FOREIGN; 189 civil defense community simulation.

5550 Community Development Programs-Foreign

308. INTERNATIONAL COMMUNITY DEVELOPMENT STATISTICAL BULLETIN. SPRING 1968 GENERAL EDITION. Community Development Foundation, New York, New York. Spring 1968. 227p. Available from Community Development Foundation, 345 East 46th Street, New York, New York 10017.

The International Community Development Statistical Bulletin describes its reporting system based on the International Standard Classification of Community Development Activities and a special project registration and progress form; briefly summarizes overall international data; and presents statistics on programs.

309. ADMINISTRATIVE PROBLEMS OF TECHNICAL ASSISTANCE TO COMMUNITY DEVELOPMENT AND AGRICULTURAL EXTENSION. Safa-Isfahani, Manouchehr. Syracuse University. D.P.A. Thesis. 1967. 365p. University Microfilms Order Number 68-5488, price in microfilm $4.70, in Xerography $16.45.

Administrative problems of United States technical assistance to community development and agricultural extension in the Philippines, Pakistan, Iran, Thailand, and Nigeria, with emphasis on field problems and on the views of local administrators, field technicians, and people. The concept of community development was too vague, and the concept of agricultural extension too general, to provide constructive guidelines. Confusion existed between the two programs with regard to roles, organizations, planning of related activities, and the training of front-line workers. Foreign community development technicians in developing nations should be basically administrative innovators; agricultural extension technicians should be innovative specialists who can work with other specialized services in modernizing agricultural science and technology; and controls on use of aid should not hinder local initiative or the development of indigenous institutions.

310. AN EVALUATION OF THE IN-SERVICE PROGRAMS ORGANIZED BY THE EXTENSION SERVICES DEPARTMENTS OF NORTHERN ZONE IN INDIA DURING THE PERIOD (1961-1965). Ahmad, Dabir. University of Arkansas. Ed.D.Thesis. 1967. 176p. University Microfilms Order Number 67-8708, price in microfilm $3.00, in Xerography $8.20.

The survey of extension services of the Departments of the Northern Zone (India) of the Directorate of Extension Service Programs for the Secondary Schools Education explored kinds of services performed, how needs of teachers were determined, and how the services could be improved. Related literature was summarized. It was found that in-service teacher education employed techniques such as workshops, seminars, school visits, evening courses, lectures, demonstration lessons, study groups, exhibitions and library service.

311. AGRICULTURAL EXTENSION IN A KUMAONESE VILLAGE. Sanwal, R.D. 15p. In Journal of Development Studies v1 n4 p384-98 July 1965.

This case study evaluated attempts by the Indian government to introduce chemical fertilizers, an improved variety of seed, and the Japanese method of paddy cultivation, to a village in the region of Kumaon. The innovations were rejected because they appeared burdensome and economicaly infeasible, but also because of attitudes connected with habitual motor responses and the sexual division of labor.

312. HIGHER EDUCATION AND DEVELOPMENT IN SOUTH-EAST ASIA. VOLUME III, PART 1. HIGH-LEVEL MANPOWER FOR DEVELOPMENT. Hunter, Guy. Paris (France). International Association of Universities, Paris (France). 1967. 182p. Available from United National Educational Scientific and Cultural Organization, Place de Fontenoy, Paris-7e, France. ($3.50, 18s. or 12.5f).

This report is in two sections: (1) major comments on high-level manpower in the whole region, a summary of conclusions reached in each country, and four comparative tables; and (2) detailed studies on Burna, Thailand, Malaya, Singapore, Sabah, Sarawak, Indonesia, Cambodia, South Viet Nam, and the Philippines.

313. CONTINUING EDUCATION--NSUKKA: A PROGRAM OF UNIVERSITY EXTENSION AIMED AT SERVING THE PRACTICAL AND INTELLECTUAL NEEDS OF A DEVELOPING NATION. Doyle, Louis A. [1968]. 66p. EDRS Order Number ED 026 577, price in microfiche $0.50, in hard copy $3.40.

A history of extension education in Nigeria, particularly as it relates to the University of Nigeria (Nsukka), is given with implications and reflections for other programs in Nigeria and other areas of Africa.

314. THE CANADIAN VOLUNTEER PROGRAM IN JAMAICA. Schlesinger, Benjamin and Sio, Arnold A. 12p. In Adult Leadership v17 n4 p173-74+ October 1968.

In a study of the Canadian University Service Overseas volunteer program in Jamaica, emphasis was on roles and experiences of volunteers as seen against goals and structure of the program. Major findings were: skills, knowledge, and attitudes were major aspects of the volunteer's role; self-development and the desire to serve were the main motives; living arrangements were crucially significant to the type of social relations; lack of equipment and the definition of assignments were major problem areas; satisfactions were largely related to personal relationships growth, knowledge gains, and the furtherance of skills. Although orientation was considered useful, area training appeared to be quite inadequate.

See also: 2210 COMMUNITY EDUCATION AND DEVELOPMENT: 2230 RURAL COMMUNITIES; 2240 URBAN ENVIRONMENT; 5280 LITERACY TRAINING-FOREIGN; 5500 COMMUNITY SERVICES AND PROGRAMS: 7150 CROSS CULTURAL TRAINING; 9000-9950 INTERNATIONAL AND FOREIGN ADULT EDUCATION; 108 research on training for development specialists; 116 annotated bibliography on sociocultural change literature; 134 information sources and adoption by farmers in India; 152 programmed learning in central Africa.

5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION

315. SOME IMPLICATIONS OF THE INDUSTRIAL TRAINING ACT OF 1964, WITH PARTICULAR REFERENCE TO THE ENGINEERING INDUSTRY. Stretch, J. A. Manchester University, Manchester (England). M.S.Thesis. October 1967. 253p. Available from Institute of Science and Technology, Sackville Street, Manchester 1, England.

A study was made in England to determine whether practices in industry were consistent with the Industrial Training Act. A case study of a medium-sized engineering firm showed that the firm was concerned with avoiding training expenses but not with improving the training or the supply of trained personnel, and thus was not entitled to training grants. Visits to other firms revealed similar deficiencies. The grant polciy itself worked against the objectives of the Act by rewarding the quantity, not quality, of trainees.

316. A SYSTEMS APPROACH TO UPDATING PROFESSIONAL PERSONNEL. Cohen, David M. and Dubin, Samuel S. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). February 1969. 12p. EDRS Order Number ED 025 718, price in microfiche $0.25, in hard copy $0.70.

Professional updating processes can be visualized as a system enabling both educators and professionals to enhance individual competence. The systems analysis model given here represents updating practices both pictorially and mathematically.

5750 Engineering, Architecture

317. OBSOLESCENCE AND UPDATING OF ENGINEERS' AND SCIENTISTS' SKILLS. FINAL REVISED REPORT. Norgren, Paul H. and Warner, Aaron W. November 1966. 164p. EDRS Order Number ED 015 324, price in microfiche $0.75, in hard copy $8.30.

Interviews were conducted in technology-oriented firms and in technical universities and governmental units concerned with the obsolescence problem. Data indicated four subareas of the problem for which remedial measures are difficult to find -- (1) Motivating professional personnel whose skills have become outdated, (2) determining dispostion of obsolescent personnel when reductions in work force are necessary, (3) identifying and updating competent project leaders, systems engineers,

and other professionals, and (4) assessing the updating needed by technical managers.

318. ON THE OBSOLESCENCE AND RETRAINING OF ENGINEERING PERSONNEL; A QUANTIFICATION OF THE PROBLEM AND SOME RECOMMENDATIONS. Zelikoff, Steven B. In Training and Development Journal; v23 n5 p3-14 May 1969.

In order to assess the skill obsolescence and retraining needs of engineering personnel, curriculums in five engineering institutions were analyzed for the period 1935-65. These were the major conclusions: (1) all specializations replaced outmoded teaching material with new bodies of knowledge; (2) a long trend (1935-60) toward greater specialization was being reversed; (3) undergraduates were being introduced earlier to areas of concentration; (4) recent breakthroughs in mathematics and physics were greatly altering existing programs; (5) relatively little effort has been directed to providing retraining specifically for engineering personnel. Recommendations were made for higher teaching standards, more Federal research and support, greater involvement in continuing education by engineering schools, professional bodies, and employers, and other changes.

319. A PROJECTIVE STUDY OF ATTITUDES TOWARD CONTINUING EDUCATION. Rubin, Irwin M. and Morgan, Homer G. 8p. Reprinted from Journal of Applied Psychology v51 n6 p453-60 1967.

A projective instrument measuring attitudes toward continuing education described a hypothetical research and development engineer as having (1) obtained an M.S. degree in a continuing education program, (2) completed seven courses, or (3) completed only one course since receiving his B.S. The three versions were randomly given to 312 engineers in a government research and development center. Research and development engineers did not perceive any significant difference between obtaining a degree or taking several courses in a continuing education program. However, obtaining a degree or taking several courses were both seen as having more positive attributes than taking only one course, were perceived as being associated with more management potential, higher ambition, and greater professionalism, and as keeping an engineer more up to date. Motivational and other implications of the study were noted.

320. READING COMPREHENSION AS A FACTOR IN COMMUNICATION WITH ENGINEERS. Sacks, George A. and Sacks, Florence. Paper presented at International Reading Association conference, Boston, Massachusetts. April 24-27, 1968. April 1968. 22p. EDRS Order Number ED 025 383, price in microfiche $0.25, in hard copy $1.20.

See also: 36 cognitive style differences between engineers and college students; 357 educational adjustment of engineers in German steel industry.

5800 Life Sciences

321. POSTDOCTORAL TRAINING IN CLINICAL PSYCHOLOGY; A SURVEY. Weiner, Irving B. In American Psychologist v23 n5 p374-7 May 1968.

A survey of postdoctoral training programs in clinical psychology (a) designed for psychologists with the Ph.D. degree from an APA-approved doctoral program, (b) administered principally by psychologists, and (c) focused primarily on education for advanced professional com petence rather than on inservice or on the job training.

5850 Medicine and Health

322. INSTITUTIONAL CONSTRAINTS ON PROFESSIONALISM, THE CASE OF THE MENTAL HEALTH PROFESSIONS. Spray, S. Lee. Paper presented at a National Seminar on Adult Education Research (Chicago, February 11-13, 1968). February 1968. 38p. EDRS Order Number ED 017 878, price in microfiche $0.25, in hard copy $2.00.

As part of a larger study of careers in the mental health field being made at the University of Chicago, this investigation studied(1) a model for studying professional behavior, (2) extent to which professional, ideological, and institutional factors influence professional functions, and (3) implications for understanding professional adult educators.

323. ELEMENTS CONTRIBUTING TO THE PERSISTENCE OF REGISTERED NURSES WHO COMPLETED BACCALAUREATE REQUIREMENTS AT INDIANA UNIVERSITY AS A SUPPLEMENT TO THE BASIC NURSING PROGRAM. Perry, Lucy C. 20p. In Adult Education v18 n4 p272-91 Summer 1968.

The records of 115 registered nurses completing baccalaureate degree requirements in nursing at Indiana University 1963-65 were studied to determine what elements were present in the nurses who persisted in completing degree requirements.

324. PUBLIC HEALTH PROFESSIONALS AND CONTINUING EDUCATION: A SURVEY OF INTERESTS AND NEEDS IN CONTINUING EDUCATION IN THE WEST. SUMMARY REPORT. Parlette, Nicholas and others. June 1968. 30p. EDRS Order Number ED 023 041, price in microfiche $0.25, in hard copy $1.60.

A study of continuing education needs and interests was made during 1966-67. Data were obtained on age, sex, education and training, experience, hierarchical position, type of employing agency, and other characteristics of 1,355 professional public health workers in the western states, on preferences for 78 course types and for newly proposed methods. General problem areas, and skills in community and organizational problem-solving, were the major concerns; multidisciplinary courses were favored over single discipline courses; and television and videotapes were supported, but not teaching machines. Participants were older, had more experience and higher positions, more advanced degrees, and were more likely to belong to the APHA or a state association. However, 66% of full-time professionals lacked a degree in public health.

See also: 6850 OCCUPATIONAL TRAINING-MISCELLANEOUS (Health Occupations); 203 television in continuing education of physicians; 234 functions, educational needs of directors of hospital education.

5900 Education

325. CHANGING THE BEHAVIOR OF SCHOOL PSYCHOLOGISTS: A TRAINING RATIONALE AND METHOD. Barclay, James R. California State College, Hayward. October 1968. 299p. EDRS Order Number ED 024 993, price in microfiche $1.25, in hard copy $15.05.

This report is concerned with the re-training of 30 existing school psychologists. It is based on the need for more effective school psychology practice, the emergence of a new social learning approach to school problems, and the development of television techniques for immediate learning.

326. THE FUTURE ROLE OF THE HIGHEST RANKING WOMAN STUDENT PERSONNEL ADMINISTRATOR IN THE COLLEGE OR UNIVERSITY AND A SUGGESTED TRAINING PROGRAM. Haller, Lola Marie. Michigan State University. Ed.D.Thesis. 1967. 147p. University Microfilms Order Number 68-4146, price in microfilm $3.00 in Xerography $7.00.

This study sought to define the future role of the highest ranking woman student personnel administrator in a college or university and to suggest an appropriate training program.

See also: 0900 ACADEMIC STUDY IN ADULT EDUCATION; 4000 TEACHERS, LEADERS, CHANGE AGENTS; 4100 ADMINISTRATORS; 14 attitudinal change in a course on adult education methods; 171, 172, 184 laboratory and sensitivity training in teacher education.

5950 Law

327. RELATIONSHIP BETWEEN THE CAREER CHANGES OF LAWYERS AND THEIR PARTICIPATION IN CONTINUING LEGAL EDUCATION. Taylor, Edward Bunker. Nebraska University. Ph.D.Thesis. 1967. 181p. University Microfilms Order Number 67-10,682, price in microfilm $3.00, in Xerography $8.40.

Data for a study of the relationship between career changes of lawyers and their participation in adult education were collected from questionnaires returned by 615 members of the Nebraska Bar Association, 51 personal interviews and studies of work histories to classify lawyers as changeable or relatively stable in their careers. Lawyers who attended the largest number of adult education activities were law school graduates, below 35 years of age, and earning $40,000 or more per year. Most lawyers were admitted to the bar and experienced special life events between the ages of 25 and 29, and experienced career changes between 30 and 34 years of age. "Change" lawyers participated in adult education, including legal seminars, at the start of their professional careers, during changes, and when they experienced special life events. Lawyers' participation in adult education increased steadily with the length of their professional careers.

See also: 199 automated programs for teaching military justice in army basic training.

6000 Religion

328. CONTINUING EDUCATION FOR MINISTERS; A PILOT EVALUATION OF THREE PROGRAMS. McCune, Shirley D. and Mills, Edgar W. 1967. 89p. EDRS Order Number ED 024 870, price in microfilm $0.50, in hard copy $4.55.

Three continuing education programs for Protestant clergyman were studied to assess program impact, gain understanding of the occupational roles and educational needs, and develop hypotheses and evaluation techniques. Behavior changes were toward a greater orientation to people and a liberalization of ideas and feelings. Educational needs pertained mainly to perspective on one's ministry, stronger occupational identity, and the study of rapid social change; regional, age, and program format variations were more significant than denominational differences.

329. THE VALUE ORIENTATIONS AND THE EDUCATIONAL PARTICIPATION OF CLERGYMEN. PROGRESS REPORT. Klever, Gerald L. February 1969. 13p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 025 724, price in microfiche $0.25, in hard copy $0.75.

This study investigated the relationship between the value orientations and the adult education participation of clergymen, and the relationship of participation, value orientation and religious tradition. The Leisure Activity Survey and a revision of the Differential Values Inventory were administered to ministers, priests, and rabbis. Only one component of participation (Cultural) was significantly related to value orientations. Four participation components (Periodical Reading-Instructional, Instructional-Hobby, Cultural, Mass Media) were significantly related to religious tradition alone. Extent of educational participation was sig-

nificantly related to value orientations but not to religious tradition.

330. RELATIONSHIPS AMONG THE ACTIVITIES AND ATTITUDES OF CHRISTIAN CLERGYMEN: A PRELIMINARY REPORT. Winter, J. Alan and Mills, Edgar W. National Council of Churches of Christ, New York. August 1968. 39p. EDRS Order Number 023 987, price in microfiche $0.25, in hard copy $2.05.

Three urban training programs for clergy sponsor Research on Training for Metropolitan Ministry (RTMM), a project of the National Council of Churches. RTMM has two main objectives: to increase understanding of the relationships among the attitudes, skills, and activities of clergymen, and to identify changes in these aspects after training. The first goal is discussed. Results of a questionnaire with attitude scales administered to 183 clergymen, most of whom were young, white, well-educated, and Protestant, indicated two main patterns of behavior; those with little time for congregational administrative work confer frequently with officials and private citizens in regard to social problems, and those who spend over 10% of their time on congregational administrative work and regard traditional social action or congregation-oriented activity as most important. A third group regarded denominational or interdenominational work as the most important aspect of the ministry. A clergyman's activities seem most closely related to his own ideas of Christian mission and individual secular action.

6050 Public Administration

331. EDUCATION INTERESTS AND BEHAVIOR OF EAST CENTRAL FLORIDA MUNICIPAL OFFICIALS. Long, Huey, B. Florida State University. March 1968. 45p. EDRS Order Number ED 018 765, price in microfiche $0.25, in hard copy $2.35.

Mailed questionnaires gathered information from 25 elected and 36 appointed officials in seven Florida counties about their interests and behavior in continuing education. Elected officials preferred activities provided by organizations other than educational institutions but participated little because of the lack of courses they wanted. Appointed officials preferred activities provided by educational institutions but did not participate much because of lack of time. Those who did participate were generally younger, with a higher academic achievement rate, and with more recent involvement in other educational activities than the non participants. Among the subjects of study most wanted were fiscal policy, management, public relations, personnel management, policy administration, and community planning.

332. PROFESSIONAL EDUCATION AND THE PUBLIC SERVICE; AN EXPLORATORY STUDY. Mosher, Frederick C. California University, Berkeley, Center for Research and Development in Higher Education. April 1968. 170p. EDRS Order Number ED 023 971. in microfiche $0.75, in hard copy $8.60.

This study was designed to assess linkages of professional education with the public service, to highlight problems among different professions and to set forth hypotheses to guide future research. Professionalism is rapidly rising in American society, government at all levels leads in the employment of professionals, and administrative leadership is growing more professional in education and experience. An increasingly direct tie between professional education and careers, the low prestige of government employment, notably among men, the inhibition of liberal arts in professional curriculums, bias against politics and government in professional faculties, and limited attention to the special problems of administration in government agencies are among the other trends suggested.

6100 Other Professions

333. A COMPARISON OF BEHAVIOR STYLES BETWEEN ENTERING AND GRADUATING STUDENTS IN OFFICER CANDIDATE SCHOOL. Petersen, Peter Barron. George Washington University. M.B.A.Thesis. February 1967. 153p. University Microfilms Order Number M-1282, price in microfilm $3.00, in Xerography $7.20.

In a comparison of the behavioral styles between entering and graduating students in an army officer candidate school, the instrument used is the Job Analysis and Interest Measurement. There is a significant difference between entering and graduating students in four comparisons established by four hypotheses. Entering students place a higher value on approval from others. Graduating students as compared with entering students tend to be more self-assertive, are more likely to be persuasive leaders, and are more prone to like supervisory activities.

334. EDUCATION FOR POLICY ROLES: AN ANALYSIS OF LECTURERS AND READING MATERIALS AT SELECTED WAR COLLEGES. Crawford, Elisabeth T. Bureau of Social Science Research, Inc., Washington, D.C. Presented at the Annual Meeting of the American Sociological Association. August, 1967. 17p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-669-840, price in microfiche $0.65, in hard copy $3.00.

Analyses of biographical data on the 851 lecturers at three senior service (war) colleges in 1964-65 and the topics of their lectures provide the basis for a discussion of how these institutions perform the function of educating higher military officers for policy roles.

See also: 53, 88 studies of ROTC training

6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT

335. THE MANAGERIAL GRID; KEY ORIENTATIONS FOR ACHIEVING PRODUCTION THROUGH PEOPLE. Blake, Robert R. and Mouton, Jane S. Jaunuary 1968. 351p. Available from Gulf Publishing Company, Box 2608, Houston , Texas 77001.

The Managerial Grid arranges a concern for production on the horizontal axis and a concern for people on the vertical axis of a coordinate system: 1,1 shows minimum concern for production and people; 9,1 shows major production emphasis and minimum human considerations; 1,9 shows maximum concern for friendly working conditions and minimum production emphasis; 5,5 shows adequate production and satisfactory morale; and 9,9 shows major concern for people and production. Most American managers are 5,5, but the ideal, the 9,9 Management, encourages teamwork and mutual respect, learns from mistakes, has a sense of directed commitment, and does not use facades. A study of 716 members of one organization showed that career accomplishment is consistently related to managerial style; the greater a career accomplishment, the more likely that the approach is 9,9 and 9,1.

336. ROLE TRANSITION IN CAREER DEVELOPMENT. Moment, David. Harvard University, Cambridge, Massachusetts. September 1967. 23p. EDRS Order Number ED 018 807, price in microfiche $0.25, in hard copy $1.25.

Role transition in adult career development is presented in terms of the technical, social , and directive role elements found in two studies of managerial behavior and career development. The individual's life space is the basic formulation of this idea. That is, major changes in the configuration of the individual's interpersonal network constitute role transition. Technical, social, and directive

role performance are three dimensions of managerial behavior. The manner in which the individual resolves potential conflict among these three roles, either by integration, polarization, or withdrawal, is related to his overall effectiveness in the job.

337. A PROGRAM OF ENTREPRENEURIAL EDUCATION FOR ECONOMIC DEVELOPMENT: THE CASE OF NORTHEAST BRAZIL. Burke, John Miles. California University, Los Angeles. Ph.D. Thesis. 1968. 255p. University Microfilms Order Number 68-8769, price in microfilm $3.30, in Xerography $11.50.

A cross-cultural comparative analysis was made of managerial education programs in the United States and Brazil and an entrepreneurial education program was designed for underdeveloped Northeast Brazil. A research model based on three components--the educational program, the business environment, and the manager-entrepreneurs--was developed. A survey questionnaire was administered to managers and latent entrepreneurs in Sao Paulo and Los Angeles; and data were collected on individuals and the business environment in Northeast Brazil. Managers in Los Angeles and Sao Paulo were very similar to each other but differed greatly from latent entrepreneurs in Northeast Brazil. The business environments of Los Angeles and Sao Paulo differed moderately, but both were quite different from that of Northeast Brazil. Differences between managerial education in Los Angeles and in Sao Paulo were generally administrative.

338. THE DEVELOPMENT AND UTILIZATION OF MANAGERIAL TALENT: A CASE STUDY OF MANUFACTURING MANAGERS IN COLUMBUS, OHIO. Kreider, Leonard Emil. Ohio State University, Columbus. Ph.D.Thesis. 1968. 334p. Clearinghouse for Federal Scientific and Technical Information Order Number PB-178-351, price in microfiche $0.65, in hard copy $3.00.

Mobility and educational development patterns were studied for Columbus area managers, largely at lower and middle levels. The diversity of labor mobility and educational patterns in the sample could be reduced by dividing the manufacturing managers into subcategories according to seven departmental areas of work. The managers were relatively low on the occupational, employer, and geographic dimensions of mobility. Employer shifts were complex, involving at least two of these dimensions; and many shifts were in occupation only. The majority reached their positions only after a number of years in nonmanagerial work, and remained employed within their departmental areas. Most felt that a college education provides adequate preparation, and it is apparent that many positions can be filled by persons without college training. Although experience seems to develop human relations skills and knowledge about technical requirements and the individual company, substitution of experience for formal education does not appear to be generally the case.

339. IDENTIFYING SUPERVISORY TRAINING NEEDS. TRAINING INFORMATION PAPER 2. Warr, Peter V. and Bird, Michael W. British Department of Employment and Productivity, London (England). 1968. 30p. Available from Training Division (TD4), Department of Employment and Productivity, 168 Regent Street, London W.L.(3s).

Training by exception is proposed as an alternative, or supplemental, method to job analysis as a means of determining training requirements for management. This involves studying through interview or critical incident reports only those aspects of the job which interfere with its smooth operation. To explore this method, interviews were held with foremen in the steel industry in Sheffield, England, to collect biographical, task, and job difficulty information. Problems identified included lack of knowledge of the job as a major difficulty, followed by relations with subordinates and other departments in the company, behavior and attitude of superiors, overall structure of the organization, and lack of confidence.

340. [MANAGERIAL AND SUPERVISORY EDUCATIONAL NEEDS IN BUSINESS AND INDUSTRY IN PENNSYLVANIA]. Pennsylvania State University, University Park. 1968. 704p. EDRS Order Number ED 025 701, price in microfiche $2.75, in hard copy $35.30.

This document presents self-perceived needs of managers and supervisors in the following Pennsylvania industries: chemical, rubber, and plastic products; banking; apparel, textile, and leather; construction; department stores; electrical machinery; fabricated metal products; insurance; machinery (except electrical); transportation equipment; gas and electrical utilities; petroleum refining; primary metals; professional, scientific, and controlling instruments; railroads; stone, clay and glass products; telephone and telegraph; and transportation.

341. A STUDY OF THE CONTINUING EDUCATION NEEDS AND INTERESTS OF MANAGERS AND PROFESSIONAL PEOPLE IN SOUTH-CENTRAL OREGON. Easton, Edison E. Oregon State System of Higher Education. November 1968. 57p. EDRS Order Number ED 026 590, Price in microfiche $0.25, in hard copy $2.95.

Questionnaires were sent to determine educational needs of supervisors, managers, administrators, and professional people in south-central Oregon. Answers, based on 171 usable questionnaires, cannot be assumed representative, but some patterns emerged. Subject areas of greatest interest were human relations, management and organization, psychology and motivation, writing, supervision and leadership, speech, data processing, accounting, investments, personnel and manpower, labor relations. Winter was preferred for programs and 3/4 were willing to drive only 1-20 miles round trip once a week for 8-10 weeks. The seminar discussion approach was preferred. Those with over two years' college education favored faculty members over instructors from business or the professions. Those from larger organizations favored two or three day conferences and expected time off with pay and their tuition to be paid.

342. CORPORATION TRAINING IN LABOR RELATIONS; A SURVEY OF 14 LARGE CORPORATIONS. Brinker, Paul A. 4p. In Training and Development Journal v22 n7 p32-35 July 1968.

A survey was made of labor relations training among 14 of the largest corporations in the United States. The training programs can be classified into five types. The first type, training of labor specialists, is exemplified by a one-month General Electric program for employee relations managers or candidates for such positions. Executive development training, including, but not exclusively in, labor relations is conducted at Western Electric in an annual 22-week program. Top and middle management training in labor relations is given at Martin-Marietta, American Smelting, and Allied Chemical, while broader training for similar personnel is given in integrated sessions at American Airlines and Western Electric and in plant manager conferences at Olin Mathieson. Finally, a 20 to 40-hour program at Martin-Marietta, a 40-week program at International Telephone and Telegraph, a ten-session program at W.R.Grace, consultation sessions at Allied Chemical and National Lead, and a Singer program using an AFL-CIO handbook provide training for foremen.

343. A STUDY OF THE BUSINESS AND INDUSTRIAL MANAGEMENT PROGRAMS AT COLLEGE OF SAN MATEO. Pearce, Frank C. San Mateo College, California. 1968. 29p. EDRS Order Number ED 020 740, price in microfilm $0.25, in hard copy $1.55.

This survey correlates goals, characteristics, and job status of students in the college's business management and industrial management programs to learn if the curriculums meet their needs.

344. MANAGEMENT DEVELOPMENT PROGRAMS IN SELECTED INDUSTRIES ON LONG ISLAND. HOFSTRA UNIVERSITY YEARBOOK OF BUSINESS, SERIES 4, VOL 3. Sugden, Virginia M.,Ed. 1967. 419p. Available from Hofstra University, Hempstead, New York 11550.

This study traces the development of management development programs in industries in Long Island together with the scope of these programs. Chapters 2 and 3 survey the origins of management development in American Industry, and describe the managerial programs offered by four Long Island colleges. Subsequent chapters provide a detailed analysis of programs offered by public utilities, communications, banking, insurance, hospitals, department stores, and the selection of participants, levels of management served, training and development patterns in specific industries, and costs.

345. TOP MANAGEMENT EDUCATION, AN EVALUATION STUDY. Jerkedal, Ake. Swedish Council for Personnel Administration, Stockholm, Sweden. R-50. 1967. 241p. Available from The Swedish Council for Personnel Administration, Sturegatan 58, Box 5157, Stockholm 5, Sweden. EDRS Order Number ED 026 553, price in microfiche $1.00, in hard copy $12.15.

A study of management education was carried out to determine attitude change and relationships between training objectives and training evaluation, initial standing and change, and initial standing and background factors. A questionnaire and semantic differential scales measured initial attitudes and change. Questionnaires also determined background information, reasons for taking the course, policy of organizations and relation to the participants, interests, and knowledge and job experience. Raven's progressive matrices measured intellectual ability, and Rubenowitz's flexibility-rigidity scale measured resistance to change. Results showed some meaningful relationships between initial attitudes and background variables, a negative correlation between initial scores and change, and some change and background covariance requiring more verification. Change related to reasons for course attendance, suggesting that participants should be motivated before beginning the course and that study should be made of the motivation necessary to compel participants to take courses.

346. INTERNATIONAL STUDY OF MARKETING EDUCATION. Liander, Bertil, Editor. Marketing Science Institute, Philadelphia, Penna. August 1967. 641p. EDRS Order Number 022 110, price in microfiche $2.75, in hard copy $32.15.

The International Marketing Federation surveyed IMF countries to determine current trends in marketing education. This volume presents the findings of the survey of 21 countries--Argentina, Australia, Canada, Denmark, Finland, France, Greece, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Philippines, South Africa, Switzerland, Sweden, United Arab Republic, United States, United Kingdom, and West Germany. For each there is a brief discussion of the basic educational system followed by listings of the institutions offering business, management, and marketing education and descriptions of courses offered at all levels. Reference is made to current trends in education, particularly with respect to marketing. There is a chapter on marketing education in developing countries. A summary chapter and a table of sociostatistical data for all countries provide comparative analyses of the findings.

347. COMPARISON OF PERFORMANCE OF SALES TRAINING GRADUATES AND NONGRADUATES. Harris, Ward A. and Vincent, Norman L. 6p. In Journal of Applied Psychology v51 n5 p436-41 1967.

To determine if a life insurance sales training course has a favorable effect on sales agents' performance, graduates were compared with an equal number of nongraduates. While the groups performed about the same during the year the sales training was begun, the trained group produced significantly more first-year life insurance premiums, on significantly larger life policies, during the year training was completed. In addition to the sales training, two other possible reasons for these results are discussed--higher interest factor in the graduate group and the possibility of a regression phenomenon in the nongraduate group.

348. A STUDY OF THE EDUCATION AND FORMAL MANAGEMENT TRAINING OF CHIEF SALES EXECUTIVES OF LARGE INDUSTRIAL GOODS FIRMS. Vizza, Robert F. New York University, New York, New York. Ph.D.Thesis. 1967. 272p. University Microfilms Order Number 68-5377, price in microfilm $3.50, in Xerography $12.40.

To determine the educational background of chief sales executives, and their superiors, in large industrial firms, and their opinions on educational requirements for sales executives of the 1980's, respondents were surveyed and five hypotheses tested. Most sales executives of large industrial firms held a baccalaureate degree; most of those with graduate degrees had majored in business administration. Respondents tended to have little graduate education or formal management training, and a preference for professional education as opposed to liberal arts.

349. AN EMPIRICAL INVESTIGATION OF THE EFFECTIVENESS OF EXECUTIVE DEVELOPMENT PROGRAMS AS PERCEIVED BY PARTICIPATING MARKETING AND SALES EXECUTIVES. Trickett, Wilson L. Michigan State University. Ph.D.Thesis. 1967. 122p. University Microfilms Order Number 68-4228, price in microfilm $3.00, in Xerography $6.00.

A study of the effectiveness of executive development programs for marketing and sales executives tested three hypotheses: (1) participation results in benefits as perceived by the participants; (2) academically oriented programs have advantages over company programs as perceived by participants; and (3) program benefits as seen by participants are enduring. The hypotheses were basically substantiated. Three features of the more successful programs were: (1) participants had both the desire and the capacity to develop; (2) the best qualified instructors were university faculty with a business or business consulting background; (3) the curriculum fitted executives' daily employment needs, used the best learning techniques, and involved discussion among participants and with faculty.

350. IN-SERVICE TRAINING AND DEVELOPMENT PROGRAMS FOR ACCOUNTANTS IN BUSINESS AND INDUSTRY. Adams, Hobart Warren. Indiana University. D.B.A.Thesis. 1967. 313p. University Microfilms Order Number 67-11,682, price in microfilm $4.05 in Xerography $13.20.

A survey was made of inservice training for accountants in 53 business firms. Program philosophy, selection of trainees and instructors, program content, instructional program content, instructional programs, and evaluation procedures were examined.

351. PREDEPARTURE TRAINING FOR OVERSEAS; A STUDY OF AMERICAN MANAGER TRAINING FOR OVERSEAS TRANSFER. Ivancevich, John M. In Training Development Journal v23 n2 p36-40 February 1969.

A questionnaire explored predeparture training procedures of large U.S. corporations and surveyed the opinions of foreign operations managers (FOM) and overseas American managers (OAM) regarding the value of such training. Few organizations have any systematic training. Respondents (both FOM and OAM) adknowledged the value of training in the host nation's language, living conditions, and economics, but OAM emphasized language training more than FOM. Recommendations based on this study include: (1) host nation's language, living conditions, economics, and customs should be given top priority; (2) sufficient training time and more qualified instructors are needed; (3) OAM wives should participate in training; and, (4) adequate evaluation techniques should be developed.

352. WHITE-COLOR TRAINING TAKES MANY FORMS; SHARP AND OUGHTON STUDY SHOWS EXTENT OF WHITE-COLLAR TRAINING. Quackenboss, Thomas C. In Training and Development Journal v23 n4 p16-26 April 1969.

The following areas of white collar industrial training were studied: management supervisory training, data processing training, sales training, and orientation and safety training. Of 800 organizations studied, one half had their training program centralized under full time training officials. The formal training programs which received their boost in World War II led to the acceptance of the greater productivity of this method in preference to apprenticeship programs. Most organizations stressed five areas of management: communication, human relations, decision making, planning and problem solving; three fourths used inhouse resources because they were less expensive and tailored to the organization's needs. However, outside training made available qualified personnel outside the organization, involvement and sharing of views with people from other industries, removal from day to day operational pressures, and exploitation of university faculty and other experts.

See also: 133 educational program for pesticide dealers; 188 behavioral feedback in management gaming; 358 transfer of military skills to civilian occupations; 371 educational programs in Florida companies; 467 effects fo AACSB standards on evening business programs.

6300 LABOR EDUCATION

353. THE IMPACT OF THE UNION LEADERSHIP ACADEMY UPON THE BEHAVIOR AND ATTITUDES OF UNION MEMBERS; A CASE STUDY IN LONG TERM LABOR EDUCATION. RESEARCH REPORT NO. 1. Keddie, Wells H. and Ryan, Richard E. Pennsylvania State University, Department of Labor Studies. January 1969. 109p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969).

Behavioral and attitudinal changes in the Lehigh Valley Union Leadership Academy (ULA) were studied. Subjects were a group of new enrollees, a control group of unionists exposed to two or fewer ULA courses, and a subsequent group of dropouts. The study group gained in union committees membership, in attendance at meetings, level of positions held, and political activities; and surpassed the comparison group in nonpolitical community affairs participation. Exposure to the ULA program was related to behavior changes in increased union and community (especially political) activity, but self-perception, job satisfaction, perception of the worker's role in society, and other attitudes were relatively unaffected.

354. THE TRADE UNION IN THE ECONOMY AS A FACTOR IN THE DIFFERENTIAL DEVELOPMENT OF WORKERS' EDUCATION IN GREAT BRITAIN AND THE UNITED STATES. Robinson, James William. Duke University. Ph.D.Thesis. 1967. 220p. University Microfilms Order Number 68-3441, price in microfilm $3.00, in Xerography $9.90.

This study sought to determine why British and American labor education programs have differed; how present divergences differ from those of the past; and to what extent the characteristics of unions and of industrial relations explain the differences. Judicial and legislative restrictions led to British labor unions' involvement in partisan political activity early in their development; and because of reliance on economic and political pressures by the unions, British labor education was general, and lacked union participation. In the United States, reliance on collective bargaining within a regulated industrial relations system let to emphasis on union functions in labor education. Since World War II, British unions have been devoting more resources to labor education and have provided training in bargaining and administration to secure improved economic benefits. However, American labor education has shifted its attention from economic to social concerns and now includes more social science instruction, often by non-union organizations.

355. AN ANALYSIS OF PARTICIPANTS IN A LONG-TERM ADULT EDUCATION PROGRAM. Applebaum, Leon and Roberts, Higdon C., Jr. est 1968. 40p. EDRS Order Number ED 018 768, price in microfiche $0.25, in hard copy $2.10.

The study investigated personal characteristics and social factors of successful participants and dropouts in the Union Leadership Program (ULP), a three-year adult education program sponsored by Ohio State University. Successful participants were older, identified with the working class (dropouts identified with the middle class), exhibited concentration of births in Midwestern states other than Ohio and owned their own homes(dropouts exhibited a concentration of births in the South and tended to rent), were union members for a longer period of time, and were significantly more active in union and political activities.

6500 OCCUPATIONAL TRAINING

356. CURRENT OCCUPATIONS AND PAST TRAINING OF ADULT WORKERS. Miller, Ann R. Pennsylvania University. September 1967. 116p. Clearinghouse for Federal Scientific and Technical Information Order Number PB-177-866, price in microfiche $.65, in hard copy $3.00.

In April 1963, slightly over half the labor force had either completed three or more years of college or had some type of formal occupational training. The proportion without training tended to be higher among older than among younger workers. The relationship between college majors and current occupations generally seems quite close, but as workers become older they move into managerial activities and out of the occupation for which their training prepared them. The relationship between training and current occupation is more difficult to interpret for those whose formal education stopped before the completion of three years of college. Except where licensing requirements are quite rigid, none of the 31 occupations studied had as much as 60% of their workers with training directly in the occupation pursued, and most had considerably less than half. Nevertheless, a relatively high proportion of workers in many of these occupations had had some formal training.

357. TECHNOLOGICAL CHANGE AND THE NEED FOR EDUCATIONAL ADJUSTMENT. Kraft, Richard Horst Paul. California University, Berkeley. Ph.D.Thesis. 1967. 161p. University Microfilms Order Number 68-5752, price in microfilm $3.00, in Xerography $7.60.

Case studies were made in 1966 in German industry and technical universities to test hypotheses about the adjustment of technical higher education to technological change, and to collect information on occupational and educational relationships. Theoretical aspects of manpower forecasting were discussed, including conversion of occupational structures required by educational qualifications. The views of industrial officers, employers, and academic staff members were obtained, and the earnings of 8,806 engineers investigated. Findings showed neither a shortage of engineers or technicians in the electrical industry nor underutilization of highly educated manpower, but data suggest future shortages unless the system of technical education better reflects the wishes of industry. Contrary to the opinion in industry, most academic staff members felt that higher technical education should stress a broad intellectual foundation. The rate of monetary return was higher at the technician than the diploma level. More flexible educational requirements, better differentiation of engineer and technician functions, and extensive, long-range research were recommended.

358. AN EXAMINATION OF THE TRANSFERABILITY OF CERTAIN MILITARY SKILLS AND EXPERIENCE TO CIVILIAN OCCUPATIONS. Richardson, Robert Brooks. Cornell University. Ph.D. Thesis. 1967. 282p. Clearinghouse for Federal Scientific and Technical Information Order Number PB-177-372, price in microfiche $0.65, in hard copy $3.00.

The typical separatee from the armed forces makes the transition to civilian employment with ease. A small proportion (those who held nontechnical positions in the military) encounter some difficulty. A need exists to provide guidance and job information before exit from active duty. A latent skill from service as an officer is managerial and administrative proficiency. Formal education interacts with skills and occupations and is often the main determinant in qualifying ex-servicemen for civilian employment.

359. VOCATIONAL AND TECHNICAL EDUCATION; A COMPARATIVE STUDY OF PRESENT PRACTICE AND FUTURE TRENDS IN TEN COUNTRIES. MONOGRAPHS ON EDUCATION, 6. Warren, Hugh. United Nation Educational, Scientific and Cultural Organization, Paris (France). International Institute of Educational Planning. 1967. 220p. Available from Sales Section, Publishing Services, United Nations, New York, New York 10017. ($4.00).

This study presents a review of the educational systems in the United States and nine European countries. Some of the trends common to the 10 countries are the emphasis toward integration of vocational education into the general secondary education system, the possibility of student transfer from technician-training establishments to the technological faculties of universities without having to comply with the traditional university requirements of higher secondary education and the growing cooperation between industry and education. Specimen programs of study for vocational and technical education in the ten countries are included in the appendixes.

360. TRENDS IN TRAINING--SIX YEARS OF CIRF ABSTRACTS. International Labour Office, Geneva (Switzerland). 114p. In Training for Progress v6 n2-4 p1-110 1967. EDRS Order Number ED 022 052, price in microfiche $0.50, in hard copy $5.80.

This issue of "Training for Progress", a bulletin published four times annually, surveys the principal lines of thought and action in vocational education as seen through "CIRF Abstracts". An introductory editorial describes the development of "CIRF Abstracts" from its emergence in 1961. The following chapter headings are indicative of the development described: (1) "Economic, Social, and Technical Aspects," (2) "Systems and Organization of Education and Training", (3) "Vocational Orientation, Guidance and Selection", (4) "Supervisors and Technicians", (5) "Teaching and Instructing Staff", (6) "Training Methods and Teaching Aids". A bibliography of 539 abstracts is included.

361. R & D ABSTRACTS. Great Britain. Ministry of Technology, Orpington (England). TIL Report Centre. Semimonthly.

This guide to available research and development reports from the United Kingdom and elsewhere presents abstracts and annotations analyzed under 22 broad scientific and technological categories, such as aeronautics, agriculture, behavioral and social sciences, biological and medical sciences, earth sciences and oceanography, mechnaical, industrial, civil, and marine engineering, military sciences, and nuclear science and technology. The journal is published by the Ministry of Technology, TIL Reports Centre, Station Square, St. Mary Cray, Orpington, Kent, England. Yearly subscriptions 12 pounds; individual copies 10 shillings.

362. MICROFICHE COLLECTION OF DOCUMENTS REPORTED IN ABSTRACTS OF RESEARCH AND RELATED MATERIALS IN VOCATIONAL AND TECHNICAL EDUCATION, WINTER 1967. Ohio State University, Columbus. Center for Vocational Education. 1967. 7,311p. EDRS Order Number ED 015 348, price in microfiche $26.25, hard copy not available from EDRS.

Documents announced in the winter 1967 issue of "Abstracts of Research and Related Materials in Vocational and Technical Education" are included in this microfiche set.

363. ANALYTICAL STUDY OF COOPERATIVE EDUCATION IN THE UNITED STATES AND DEVELOPMENT OF A PROPOSED PLAN FOR IRAN. Farahbakhshian, Ebrahim. Colorado State College. Ed.D.Thesis. 1967. 218p. University Microfilms Order Number 68-419, price in microfilm $3.00, in Xerography $9.90.

364. A SURVEY OF VOCATIONAL-TECHNICAL EDUCATION NEEDS IN GOSHEN COUNTY. Dodge, Larry D. Eastern Wyoming College, Torrington. August 1967. 77p. EDRS Order Number ED 016 470, price in microfiche $0.50, in hard copy $3.95.

To determine the vocational-educational needs of Goshen County, questionnaires were sent to high school students, employers in business and industry, and selected county adults. Results indicated need for programs for auto mechanics, medical and laboratory technicians, and nurse's aides, representatives of businesses gave the occupational category of their current employees, their preferences in educational background, and their prediction of hiring needs.

365. THE ILLINOIS VALLEY COMMUNITY COLLEGE OCCUPATIONAL SURVEY, A COOPERATIVE ARRANGEMENT PROGRAM UNDER TITLE II OF THE HIGHER EDUCATION ACT OF 1965. Northern Illinois University, De Kalb. 1967. 133p. EDRS Order Number ED 020 715, price in microfiche $0.75, in hard copy $6.75.

To determine the relation between occupational categories and recommended training, questionnaire returns represent employers, interviews cover professionals and the executives, and consultant reports cover critical occupations. Certain kinds of training can be applied to several industries, while other kinds have only specialized use. Employers in each industrial group listed the preferred training for various jobs. The special reports cover the fields of chemical technology, office work, food service, health service, metal working, and the electrical/electronics industry. Manpower needs, training conditions, and trends, are summarized.

366. SURVEY OF PRESENT METHODS OF FOLLOW-UP OF PUBLIC POST SECONDARY SCHOOL GRADUATES IN COOPERATIVE AND PREPARATORY VOCATIONAL PROGRAMS AND DEVELOPMENT OF A FOLLOW-UP. Goff, Maurice L. Wyoming University, Laramie. Ed.D.Thesis. January 1968. 221p. Available from the Library, University of Wyoming, Laramie, Wyoming 82071

To assess followup procedures for graduates of public post secondary vocational programs, and to develop an effective procedure, fifty state directors provided names of local administrators using systematic followups, and gave suggestions for developing a proceudre. Followups were almost exclusively conducted at the local level; the most common method was to get data from students before graduation; a procedure which could provide accurate information was used by 51.5% of the administrators. The study revealed neglect in evaluation and ascertained limitations in constructing followup devices.

367. A PLAN OF ORGANIZATION, ADMINISTRATION, AND ELEMENTS OF FINANCE FOR VOCATIONAL-TECHNICAL ADULT EDUCATION, BIRMINGHAM CITY SCHOOL SYSTEM. Shelton, John Alton. Alabama University. Ed.D.Thesis. 1968. 256p. University Microfilms Order Number 68-15,511, price in microfilm $3.30, in Xerography $11.70.

To formulate a plan of organization for vocational education and adult education in the Birmingham schools, this study entailed an extensive literature review on vocational education; a historical review of several Birmingham schools; a survey of existing programs; and an evaluative survey of programs in three outstanding Florida and Georgia programs

368. THE STRUCTURE OF RELATED INSTRUCTION IN WISCONSIN APPRENTICESHIP PROGRAMS. Crabtree, James Stephen. Wisconsin University, Madison. Ph.D.Thesis. 1967. 283p. University Microfilms Order Number 67-16,918, price in microfilm $3.65, in Xerography $12.85.

A study was made of enrollment patterns, curricula, instructional staff, instructional costs, and instruction for apprentices in Wisconsin vocational schools. Findings included: (1) 406 programs were offered in 79 trades at 37 vocational schools; (2) apprenticeship enrollments ranged from 0.8% to 6.9% of vocational school enrollments; (3) enrollment was flexible, and instruction stressed individual rather than group orientation; (4) trades taught by circuit faculty had standardized state curricula, but not courses taught by resident faculty; (5) circuit teachers surpassed resident teachers in tenure and degrees, and in years of teaching and related experience; (6) instructional costs, averaging about $207 per apprentice, were highest where enrollments were smallest.

369. AN EDUCATIONAL AND SOCIOLOGICAL STUDY OF PART-TIME VOCATIONAL EVENING CLASS STUDENTS AT A COLLEGE OF FURTHER EDUCATION. Hughes, Edward. Cardiff University (Wales). B.Sc.Thesis. 140p. Available from University College Library, Cardiff University, Cardiff, Wales.

Test of intelligence, personality adjustment, and attitudes toward school and examinations were given to vocational evening class students attending a British college of further education. Continuation students were more intelligent than those resuming after a lapse of time, and those attending academic classes were more favorable toward school than similar students in technical classes. Attitudes toward school correlated all measures but intelligence among continuation students as a group, but only with social adjustment for students as a whole. No differences were found by sex or parental employment history; and examination performances were not related to attitude or parental employment. Students from salaried homes were less favorable toward school than those from wage earning homes. Former grammer school students were more intelligent than secondary modern school graduates. College examination performance was not related to attitude, adjustment, or intelligence.

370. INDUSTRY AND VOCATIONAL TRAINING; NATIONAL AND HISTORICAL STUDIES. Lauwerys, Joseph A., Ed. and Scanlon, David G., Ed. 1968. 147p. Section II of THE WORLD YEAR BOOK OF EDUCATION, 1968; 1968. 147p. Available from Harcourt, Brace and World, Inc., 757 Third Avenue, New York, New York 10017.

371. ADULT EDUCATION ACTIVITIES OF FLORIDA'S BUSINESSES AND INDUSTRIES, PRESENT SCOPE AND ANTICIPATED CHANGE. Schroeder, Wayne L. and Sapienza, Dunnovan L. Florida State University, Tallahassee, School of Education. March 1968. 78p. EDRS Order Number ED 024866 price in microfiche $0.50, in hard copy $4.00.

A questionnaire to study company education programs was sent to Florida companies employing at least 200 people. Training programs were conducted in 55% of the firms, with an additional 12% expecting to develop such programs. Training directors were employed in more than half of the firms but they were more often prepared in subject matter than in teaching adults. All employee levels were included in 71% of the firms having programs. Attendance was compulsory for 11% and voluntary in 34%, while 45% had a mixture of voluntary and compulsory attendance. Tuition refunds were used to encourage education outside the company, but company programs were free to employees in 79% of the firms. Chief purposes were to orient new employees, and to upgrade or retrain old employees, although content of courses was managerial oriented in 77% of the firms. On the job training, classes, and conferences were the favorite methods of instruction.

372. MOTIVATIONAL CONSTRAINTS IN AN INDUSTRIAL RETRAINING PROGRAM. Rosen, Ned A. and others. The American Foundation on Automation and Employment, sponsor. 1967. 15p. In Personnel Psychology v18 n1 Spring 1965.

This is a followup study of a 1959-60 corporate retraining program for blue collar employees, designed to assess the long range impact of the program on job

satisfactions of retrained employees. There was little change in satisfaction except for the retrainees, and social psychological factors influenced retraining decisions in different ways for different people. Poorly educated, older and high seniority workers were less likely to volunteer for retraining. Younger workers with low educational backgrounds were likely to volunteer, despite average levels of satisfaction with original promotion prospects, and below average confidence in ability to learn.

See also: 2600-3250 INSTRUCTIONAL METHODS; 3500 INSTRUCTIONAL DEVICES; 4620-4635 AGE GROUPS; 4655 EDUCATION OF WOMEN; 5230 ADULT BASIC EDUCATION; 51 relation of conformity to job status; 52 anomia and use of vocational schools; 75 conference on military testing; 77 validity of GATB; 82, 83 Airman Qualifying Examination; 93 crossover of military skills to civilian occupations; 129, 196 annotated bibliographies on instructional methods, audiovisual theory and aids; 135 discovery method in training older workers; 137 effectiveness of vocational teachers; 206 effective verbal instructions in training materials; 214 part-time vocational teachers in junior colleges; 479 HumRRO bibliography.

6550 Unskilled, Disadvantaged

373. EDUCATION AND POVERTY. Ribich, Thomas I. Princeton University, New Jersey. Ph.D.Thesis. 1967. 268p. University Microfilms Order Number 68-2513, price in microfilm $3.45, in Xerography $12.15.

This study focused on the measurement of income gains from the education of poor persons. Several kinds of education (job retraining, dropout prevention, compensatory education, preschool programs, increased expenditures per pupil) were examined in terms of efficiency (average cost versus average returns). Major conclusions: (1) vocational training shows a higher payoff than conventional education; (2) benefit-cost ratios do not justify emphasis on early school or preschool years; (3) benefit-cost ratios rise from adding expenditures to school districts that are now spending relatively little; (4) general education probably results in bigger second generation effects, greater psychological returns, and more intangible benefits than vocational education.

374. OUR EXPERIENCE WITH RETRAINING AND RELOCATION. Somers, Gerald G. Chapter 8 In TOWARD A MANPOWER POLICY, Edited by Robert A. Gordon. John Wiley, New York 1967. 31p. EDRS Order Number ED 023 944, price in microfiche $0.25, in hard copy $1.65.

Although government retraining and relocation programs are now an integral part of the economy, there must be research evaluation of each to establish manpower policies. A few detailed evaluations have been made of Federal programs--a 1962 survey of employers in West Virginia who had hired trainees, a 1964 nationwide questionnaire survey of the American Society of Training Directors, and a questionnaire to 1,000 employers in Wisconsin to determine their attitudes toward the apprenticeship form of on the job training. The evaluations indicate that the programs improve the economic status of trainees. However, much more extensive and sophisticated benefit-cost analyses will be required to determine whether the programs are significant in reducing unemployment and poverty. Presumabley economic benefits and costs of relocation allowances aid the individual, but the extent of their usefulness as a social investment remains to be established. Studies must be cumulative in their design and results.

375. CONTRIBUTIONS AND COSTS OF MANPOWER DEVELOPMENT AND TRAINING. POLICY PAPERS IN HUMAN RESOURCES AND INDUSTRIAL RELATIONS, NO.5. Mangum, Garth L. Michigan University, Ann Arbor. December 1967. 95p. EDRS Order Number ED 021 949, price in microfiche $0.50, in hard copy $4.85. Also available from Publications Office

Institute of Labor and Industrial Relations, Museums Annex, Ann Arbor, Michigan 48104. ($2.00).

As the result of congressional intent and experience, MDTA programs have six identifiable objectives: (1) facilitating employment of the unemployed, (2) reducing poverty, (3) lessening inflation, (4) meeting labor shortages, (5) upgrading the labor force, and (6) revamping traditional institutions. The extent to which each objective has been achieved is examined and estimates of the overall costs are made before turning to a review of cost-benefit studies for comparison with previous conclusions. The results of the appraisal are clearly favorable.

376. COST-EFFECTIVENESS ANALYSIS FOR THE "WAR ON POVERTY". Besen, Stanley M. and others. 1967. 15p. Chapter 10 in Cost-Effectiveness Analysis, edited by Thomas A. Goldman. Available from Frederick A. Praeger, Publisher, New York, New York 10003.

Two anti-poverty programs--investment in education and in highways and other public facilities--should increase earnings and employment through an increase in production. There is evidence that training expenditures have a return at least equal to other forms of capital investment; the return has both private and social components, and there are direct and opportunity costs to consider. In a Massachusetts retraining program from 1958-61 the "net benefits accruing to society" were about $3300 per worker; a similar study in West Virginia showed net returns of about $4000 per worker. The Job Corps and the Neighborhood Youth Corps cannot be judged properly by studying returns to other training programs, since these two programs differ significantly from others. New highways have benefits in real output and employment, new industry, and an increase in land values. There are many questions relating to cost analysis in highway construction which cannot be answered adequately. Until programs can be evaluated effectively, large financial commitments should not be made; programs should be diversified and evaluation should be set up.

377. RETRAINING THE UNEMPLOYED. Somers, Gerald G., Ed. Ford Foundation, New York, York. 1968. 350p. Available from University of Wisconsin Press, Box 1379, Madison, Wisconsin 53701 ($10.00).

Case histories evaluate the effectiveness of retraining programs for unemployed workers, judging them by their success in placing workers in useful employment. Through cost benefit analyses and other evaluations of specific programs where such factors as the personal characteristics of trainees, the labor market, institutional placement, and procedural arrangements varied widely, conclusions have been drawn as to the economic and other benefits of retraining programs in general.

378. THE INFLUENCE OF MDTA TRAINING ON EARNINGS. MANPOWER EVALUATION REPORT NO. 8. United States Department of Labor, Washington, D.C. Manpower Administration. December 1968. 40p. EDRS Order Number ED 026 542, price in microfiche $0.25, in hard copy $2.10. Also available from the Manpower Administration, U.S.Dept. of Labor, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20210.

Accumulated data on more than 100,000 persons who completed Manpower Development and Training Act institutional training during 1965 and 1966 and who were employed following their training were used. The results reaffirm the finding of an earlier study which showed a general upward shift in overall hourly earnings following training as compared with pretraining earnings levels, but with differing impact upon various component groups. Some of the findings were: (1) Overall, median earnings for employed graduates were $1.73 per hour after training compared with $1.44 before training - an increase of 20 percent, (2) Family heads showed a greater advance in earnings than the trainee group as a whole, (3) Nonwhite family heads also had greater earnings gains, compared with the group as a

whole, and (4) Over one of every four trainees moved laterally within the same earnings level, while one of every six retrogressed to a lower earnings level--many of these, however, represented displaced workers who of necessity had to learn new skills.

379. JOB TRAINING: RESEARCH REPORT NO. 4. American Society for Personnel Administration; Manpower Research Council, Milwaukee, Wisconsin. 1967. 10p. EDRS Order Number ED 025 635, price in microfiche $0.25, in hard copy $0.60.

This document contains a summary of a survey of 930 companies employing 4,375,665 persons. The survey deals with in plant and outside agency job training programs. Some of the findings were: (1) Respondents feel that there are numerous institutions in the community to provide skill training, but 60 percent feel that this training falls short of needs, (2) Participants expressed great willingness to serve on advisory boards, (3) About 50 percent felt their universities lack adequate vocational training facilities and recommended public high school and in-plant training as the solution, (4) Over 85 percent are in favor of public technical colleges on a 2-year basis, (5) 17 percent have established training progragrams with a view to attracting minority workers and 50 percent felt their programs were successful, (6) Manpower Development Training Administration has not help find qualified employees for 80 percent of the respondents, and (7) Only 19 percent have employed persons trained in Job Corps centers, and of that group, 60 percent regard the experience as satisfactory.

380. INNER-CITY NEGRO YOUTH IN A JOB TRAINING PROJECT: A STUDY OF FACTORS RELATED TO ATTRITION AND JOB SUCCESS. FINAL REPORT. Gurin, Gerald. Michigan University, Ann Arbor. Survey Research Center. December 1968. 155p. EDRS Order Number ED 026 530, price in microfiche $0.75, in hard copy $7.85.

Results of a study of an experimental job training project for underemployed "functionally illiterate" inner-city Negro youth are reported. The project included basic education, vocational training, and counseling. The study focused on individual factors related to success, using data derived from questionnaires and interviews with trainees, their mothers, job supervisors, and project staff. A secondary focus was on the training program itself and reactions of the trainees. Among the conclusions were: (1) Skill training is clearly the most significant aspect even when heavy emphasis is placed on other things, (2) Basic education must focus around content that is clearly job-related, (3) The counselor's personal interest may be more important than the more formal socializing functions, and (4) While the post-training employment of completers was more regular than that of dropouts, there were no significant wage differences.

381. TIME TRENDS IN THE BENEFITS FROM RETRAINING IN CONNECTICUT. REPRINT SERIES, NO 103. Borus, Michael E. Michigan State University. Winter 1967. 15p. Available from School of Labor and Industrial Relations, Michigan State University, East Lansing, Michigan 48823.

Information on participants who retrained between November, 1962 and April 1963, was collected by interviews and questionnaires, and by earnings histories. A basic regression was used to explain earnings in each year from 1962-66, considering such variables as sex, marital status, job status of nontrainees, age, education, number of dependents, extrapolated 1960 earnings, length of training course, and training status. Benefits continued to accrue for each of the five years following the course, with an average gain in earnings of $5,834. The average gain for the five year period was only influenced by age, with greatest increases among trainees between 30 and 35. This influence of age did not become significant until the third year following the courses, illustrating the limitations of benefit-cost analyses which focus on short term gains.

382. VARIABLES RELATED TO MDTA TRAINEE EMPLOYMENT SUCCESS IN MINNESOTA. Pucel, David

J. Minnesota Research Coordinating Unit in Occupational Education, Minneapolis; Office of Education (DHEW), Washington, D.C., sponsors. February 1968. 36p. EDRS Order Number ED 022 043, price in microfiche $0.25, in hard copy $1.90.

To determine if descriptive data about trainees being gathered by the employment service, such as personal information and General Aptitude Test Battery scores, are effective predictors of success in MDTA. An attempt was also made at isolating attitudes and skill development during the training program which might be related to success in the occupation. Multiple regression equations were developed for each group using 22 personal and training related variables and 15 in-school instructor rating variables. Each equation predicted the criterion (post-training employment status) above the .01 level of significance for their respective groups. However, no equation predicted well in all of the three groups. The findings imply systematic differences between persons who succeed and those who do not.

383. HOW FARE MDTA EX-TRAINEES? AN EIGHTEEN MONTHS FOLLOW-UP STUDY OF FIVE HUNDRED SUCH PERSONS. London, H.H. Missouri University, Columbia. Office of Manpower Policy, Evaluation, and Research (DOL), Washington, D.C. December 1967. 219p. Available from Clearinghouse for Federal Scientific and Technical Education, Springfield, Virginia 22151, Order Number FB 177626, price in microfiche $0.65, in hard copy $3.00.

This study examined the socioeconomic characteristics of ex-trainees, the socioeconomic changes that occurred after training, the long- and short-range effectiveness of the MDTA program, and how these may be improved. Followup interviews were held at 6-, 12-, and 18-month intervals and employers rated performance. Some findings were: (1) 21.4 percent were receiving some welfare for an average of 14.8 months some time during the 18 months preceding training, (2) Pretraining work history was both erratic and irregular, (3) Personal service, semiskilled, skilled, and unskilled, in that order, together with clerical, accounted for the majority of post-training jobs, and (4) Neither the type of job nor the wages received seemed to have any bearing on attitude toward the job, and most liked their work.

384. JOB-RELATED BEHAVIOR RATING SCALE. REPORT OF A PRELIMINARY STUDY FOR OEO. Buehler, Roy E. In training Development Journal v23 n3 p14-20 March 1969.

This study was done (1) to test a procedure for determining job-related behaviors (excluding technical skills) required for job retention, and (2) to test a procedure for constructing a rating scale for progressive acquisition of specific job retention behavior by vocational trainees at a Job Corps Center. Criteria used in the scale were obtained from employers in the community. Item validation data were derived from the behavioral statements of job supervisors. Other data for establishing reliability of scale ratings came from Job Corps staff members. Three rating categories were used: (1) essential; (2) desirable but not essential; (3) unimportant. It was decided that whenever a trainee's ratings are "always" for all appropriate behavior and "never" for inappropriate behavior, he is ready for graduation and job placement.

385. AN EVALUATION OF THE MANPOWER DEVELOPMENT AND TRAINING PROGRAM IN THE LINCOLN, NEBRASKA PUBLIC SCHOOLS. Grell, Darrell Dean. Nebraska University, Teachers College, Lincoln. Ed.D.Thesis. 1967. 151p. University Microfilms Order Number 67-15,986, price in microfilm $3.00, in Xerography $7.20.

This study evaluated the effectiveness of the Manpower Development and Training Program (MDTA) of the Lincoln Public Schools during its first three years. The sample consisted of students in the clerical, practical nursing, and dental assistant programs, and employers of MDTA graduates. Findings included the following: (1) Manpower graduates become satisfactory employees; (2) the Lincoln programs have a higher percentage of employed graduates, and a larger percentage of satisfied employers, than reported in national studies; (3) graduates were satisfied with the courses and consider their training valuable; (4) respondents felt that program

length was satisfactory and that the number of absences allowed was fair; (5) students spend over seven hours a week in study outside the classroom; (6) employers named dependability as the outstanding trait of graduates.

386. MANPOWER DEVELOPMENT TRAINING IN ALABAMA. Langdon, Charles Watson. Alabama University. Ph.D.Thesis. 1967. 364p. University Microfilms Order Number 67-13,244, price in microfilm $4.65, in Xerography $16.45.

This study aims at evaluation of the Manpower and Development Training Act as a tool for reducing unemployment; examination of the Alabama and Federal framework for implementation of MDTA; and the survey of the results of retraining in Alabama during the first three years. During the first forty and one half months there were 6,000 enrollees in Alabama, and 275,000 in the nation. This state also shows a smaller percentage of enrollees (73.7% and 76.2%), and "graduates" (65.1% to 74.0%).

387. FOLLOW-UP OF MDTA E AND D PROJECT CONDUCTED BY TUSKEGEE INSTITUTE. Johnson, Louise A. Bureau of Social Science Research, Inc., Washington, D.C. May 1967. 100p. EDRS Order Number ED 016 084, price in microfiche $0.50, in hard copy $5.10.

388. HIGH SCHOOL DROPOUTS ACHIEVEMENT AND TRAINING SUCCESS; AN ANALYSIS OF MULTIPLE FACTORS. Roberts, Tommy L. 6p. In Peabody Journal of Education v46 n1 p45-50 July 1968.

A study was made of factors in the achievement and training success of high school dropouts enrolled in a Federally supported manpower development program. The background factors studied (cultural background, home background, family mobility, sex, age, race) did not show any significant influence on training success and academic and vocational achievement. However, race, age and sex tend to influence significantly the holding power of the program.

389. THE REHABILITATION OF SCHOOL DROPOUTS IN OKLAHOMA CITY; AN EXPERIMENTAL APPRAISAL. FINAL REPORT. Hornbostel, Victor O. and others. Oklahoma State University, Stillwater. 196p. EDRS Order Number ED 021 979, price in microfiche $0.75, in hard copy $9.90.

The subjects were unemployed or under-employed school dropouts who had been out of school for at least 1 year. Comparisons were made among subjects who received a combination of vocational and academic training, subjects who received only vocational training, subjects who received only academic training, and subjects who received little or no training. Findings included: (1) During the first year covered by the followup period, the academic-vocational and the vocational groups exceeded the control group in proportions entering the labor market, in average number of weeks of employment, and in average annual earnings, and (2) By the end of second year of followup, however, there were fewer significant differences on each of these variables.

390. A COMPARATIVE ANALYSIS OF THE IMPACT OF VARIOUS TYPES OF CURRICULA ON THE VOCATIONAL SUCCESS OF SCHOOL DROPOUTS. Boggs, Gerald Eugene. Office of Manpower Policy, Evaluation and Research (DOL), Washington, D.C. May 1967. 114p. EDRS Order Number ED 022 062, price in microfiche $0.50, in hard copy $5.80.

The purpose was to investigate vocational success differences in four groups of subjects at the School Dropout Rehabilitation Program in Oklahoma City. An ex post facto design involved subjects in three curriculums (combination, vocation, or academic) and a control group. Results were: (1) The ratio of subjects entering the labor market to subjects not entering was greater for the vocational group than for the control group, (2) The ratios of employed to unemployed were greater for the combination and vocational groups than for the control group, (3) Combination, vocational, and academic groups were employed more days than the control group,

and (4) The combination and vocational groups were employed more days than the academic group.

391. A DESIGN FOR ACTION RESEARCH AT PROJECT TRY. FINAL REPORT. Rosenberg, Sidney and Adkins, Winthrop R. Training Resources for Youth Inc., Brooklyn, New York. 1967.132p EDRS Order Number ED 018 524, price in microfiche $0.75, in hard copy $6.70.

This report outlines a demonstration-research training program for disadvantaged out-of-school, unemployed, or underemployed males from the predominantly Negro area of Brooklyn. The program offers trade training, life skills education, recreation, job placement and general posttraining followup. Program personnel are drawn largely from the community. The program seeks to develop a new curriculum and to determine its effectiveness. A multifaceted action research design is described in detail and various operational problems in conducting the research are discussed. A "life skills curriculum model", which exemplifies an experience-centered approach to curriculum development, is presented in the appendix.

392. RELATION BETWEEN PREFERENCE FOR DELAYED GRATIFICATION AND BEHAVIOR IN AN INDUSTRIAL TRAINING PROGRAM. Cochran, George Clark. Stanford University, California. Ed.D.Thesis. 1967. 78p. University Microfilms Order Number 67-11,081, price in microfilm $3.00, in Xerography $4.20.

Relationships were studied between delayed gratification pattern (DGP) and desirable behaviors (completion, attendance, punctuality) in a Manpower Training program in aircraft assembly. Subjects were unemployed trainees, aged 18-26. Two questions and a DGP index were used. Trainees who dropped out were to report the reason(s). Dropouts who complied were FGC (For Good Cause); those who did not were NFGC (Not For Good Cause). Three categories of completers were established: Those absent and/or tardy at least once; those neither absent nor tardy, and high completers (upper 10%) neither absent nor tardy. Findings included the following: (1) DGP scores were significantly related to responses to the two questions, FGC versus NFGC status, and NFGC dropouts versus completers; (2) completers who were neither absent nor tardy averaged higher on DGP than those absent and/or tardy; (3) high completers averaged slightly lower on DGP than the total of completers who were neither absent nor tardy; (4) when questionnaires were stratified by question responses, average DGP scores ranged from lower to higher according to performance, with significant differences between NFGC dropouts and all higher performance levels.

393. AN EVALUATION OF INSTITUTIONAL VOCATIONAL TRAINING RECEIVED BY AMERICAN INDIANS THROUGH THE MUSKOGEE, OKLAHOMA AREA OFFICE OF THE BUREAU OF INDIAN AFFAIRS. Blume, Paul R. Oklahoma State University, Stillwater. May 1968. 261p. University Microfilms.

Of the 670 Indians who received adult vocational training, information was obtained for 220 from school files and by mailed questionnaire. Some trainee characteristics were: (1) The average trainee was better educated than the average Indian, (2) The employment and income levels were low, (3) There was a fairly high non-completion rate among the trainees, and (4) There was some indication that the questionnaire response rate was partially affected by the cultural and historical background of the trainees. Conclusions were: (1) Completion of training results in an average increase in income of $1,929, (2) The average increase in employment was about 3 and one half months of additional employment, and (3) The social benefit cost ratio was found to be 2.39.

394. A SOCIAL REINFORCEMENT EXPERIMENT IN AN OPEN SOCIAL SYSTEM. Buehler, Roy E. and others. Litton Industries, Inc., College Park Maryland, Educational Systems Division. Office of Economic Opportunity, Washington, D.C. October 1967. 94p. Clearinghouse for Federal Scientific & Technical Information Order Number PB-177-474, price in microfiche $0.65, in hard copy $3.00.

The object of the study was to test a behavior modification approach to behavior training, in a Job Corps Center for men. The model for this approach is derived from recent research in social reinforcement learning, as applied to behavior training in institutional settings.

395. THE RELATIONSHIP BETWEEN SUCCESS IN BUSINESS SCHOOL, EMPLOYMENT STATUS AND DEMOGRAPHIC AND PSYCHOMETRIC VARIABLES FOR RAMSEY COUNTY WELFARE DEPARTMENT, WORK AND TRAINING PROJECT PARTICIPANTS. Wasson, John B. Ramsey County Welfare Department, St. Paul, Minnesota, Work and Training Project TR-6. July 1967. 18p. EDRS Order Number ED 022 127 Price in microfiche $0.25, in hard copy $1.00.

To aid the rehabilitation of welfare recipients, participants completed training at private business schools. Their average absences per month correlated with age, while grade average did not correlate with any variables. Typing speed correlated with years of education completed, reading comprehension IQ on the Army Classification Test, and four of the scales of the Minnesota Multiphasic Personality Inventory (MMPI). Terminal employment status correlated significantly with age, with three of the interest scales of the Kuder Preference Record, with the numbers subtest of the Minnesota Clerical Test, and with the K scale of the MMPI. Monthly salary correlated with two of the Kuder scales, with the numbers subtest of the Minnesota Clerical Test and with four MMPI scales. There was a negative correlation between employment status and typing speed.

396. EMPLOYING THE DISADVANTAGED: INLAND STEEL'S EXPERIENCE. Campbell, Ralph. In Issues in Industrial Society v1 n1 p30-41 1969.

397. A SECOND INVESTIGATION OF THE FEASIBILITY OF NAVY COMMISSARYMAN TRAINING FOR GROUP IV PERSONNEL. Hooprich, Eugene A. Naval Personnel Research Activity, San Diego, California. 1968. 29p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-671-186, price in microfiche $0.65, in hard copy $3.00.

To determine the feasibility of Navy Class A Commissaryman School training for Mental Group IV personnel, the achievement of Group IV personnel was compared with that of regular personnel. Although the Group IV personnel completed the Commissaryman training, their achievement tended to be significantly less than that of the regular students in the same class. However, the achievement was similar when evaluated by actual job performance measures. Statistical analyses of pretraining variables and course achievement criteria also were performed.

398. FEASIBILITY OF EQUIPMENT OPERATOR CLASS "A" SCHOOL TRAINING FOR GROUP IV PERSONNEL. Standlee, Lloyd S. and Saylor, John.C. U.S. Naval Personnel Research Activity, San Diego, California. March 1968. 20p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-670-213, price in microfiche $0.65, in hard copy $3.00.

The performance of Group IV personnel was compared with that of regular personnel in the Equipment Operator School. None of the Group IV trainees failed the course, though their scores were lower, especially on written tests. The area causing Group IV trainees the most difficulty was mathematics. No major changes are required to enable Group IV personnel to complete the Equipment Operator Class "A" School, though the mathematics might be reduced if this appears warranted with respect to the math actually required on the job.

399. FEASIBILITY OF STEELWORKER CLASS "A" SCHOOL TRAINING FOR GROUP IV PERSONNEL. Standlee, Lloyd S. and Saylor, John C. U.S. Naval Personnel Research Activity, San Diego, California. August 1968. 21p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-675-777, price in microfiche $0.65, in hard copy $3.00.

The performance of Group IV personnel was compared with that of regular recruits in

two classes of the Steelworker School. All the Group IV trainees completed the training. Group IV achievement scores were lower than those of the regular trainees in all areas of instruction. Differences were greater in academic than in practical areas. Mathematics caused the Group IV trainees the most difficulty. No major changes are required to enable Group IV personnel to attend the Steelworker School, although the mathematics might be reduced.

See also: 4710 LOW APTITUDE GROUPS; 4750-4870 DISADVANTAGED GROUPS; 5230 ADULT BASIC EDUCATION: 3 advisory report on federal manpower programs; 70, 81, 91, 139, 270 recruitment, counseling, leadership styles in various MDTA programs; 80, 268 studies of Group IV low aptitude military trainees; 274 predictive assessment of adult mentally retarded.

6600 Clerical, Sales Occupations

400. ANALYSIS OF IN-COMPANY AND OUT-OF-COMPANY EDUCATIONAL AND TRAINING PRACTICES FOR CLERICAL WORKERS OF LEADING FIRMS IN THE GREATER BOSTON AREA. (VOLUMES I and II). Tedesco, Eleanor Hollis. Michigan State University, East Lansing. Ed.D.Thesis. 1967. 673p. University Microfilms Order Number 68-4226, price in microfilm $8.55, in Xerography $30.40.

This study was concerned with company training for clerical workers among firms in the Boston area, descriptions of training programs that these companies provide and ones conducted by out-of-company agencies. Findings include: companies prefer to train their own clerical workers; large companies have many training opportunities; there is a gap between training provided by schools and the clerical training required for on-the-job performance; technological changes indicate a need for training in data processing and technical secretarial skills; and valid evidence concerning the value of training programs is lacking.

401. A CRITICAL ANALYSIS AND AN EVALUATION OF THE SECRETARIAL PROGRAMS IN THE UNIVERSITY COLLEGE OF THE UNIVERSITY OF CINCINNATI. Bright, Don Emerson. Cincinnati University. Ph.D.Thesis. 1967. 311p. University Microfilms Order Number 67-15,943, price in microfilm $4.00, in Xerography $14.20.

402. GUIDELINES FOR ESTABLISHING POST-SECONDARY DISTRIBUTIVE EDUCATION PROGRAMS IN OHIO. Lucas, Stephen Rodney. Ohio State University, Columbus. Ph.D.Thesis. 1967. 170p. University Microfilms Order Number 68-3018, price in microfilm $3.00, in Xerography $7.80.

A study was made in Ohio a postsecondary distributive education midmanagement program which received agreement from state superviosrs, teacher educators, instructors of distributive education, and from employers. A questionnaire with 39 controversial questions showed substantial agreement within and among groups. Agreement ranged from 87.2% to 97.4% in each of the four groups on 25 of the 39 items. Six of the other 14 received majority agreement in three groups and eight received majority agreement in two groups. Recommendations included an advisory committee, consultation by the state department of public instruction, a regional need survey, use of educational institutions of various types, and associate degree, operation on a cooperative basis involving work experience, curriculum planning for specific employment areas, and participation in the Distributive Education Clubs of America.

6650 Service Occupations

403. ROLE LEARNING FOR POLICE RECRIUTS;SOME PROBLEMS IN THE PROCESS OF PREPARATION FOR THE UNCERTAINTIES OF POLICE WORK. McNamara, John Harold. California University, Los Angeles. Ph.D.Thesis. 1967. 315p. University Microfilms Order Number 67-11,263, price in microfilm $4.05, in Xerography $14.20.

The recruit training program of the New York City Police Department was studied to identify problems pertaining to the legality of police actions, prestige of police, interpersonal methods effective in police work, and organizational factors in the department. Many gains from training disappear in the field, where conditions are often at variance with training content. The "semi-military" model for the Police Academy and the department is inappropriate for many levels of duty, and that the use of negative sanctions and close supervision hinder development of self-directing, autonomous policemen. Contradictions between formal and informal organizations in the department were also a hindrance. Problems of police inactivity, organizational loyalty, and innovation were linked to problems in training.

404. DEVELOPMENT OF MULTI-MEDIA PROGRAMMED INSTRUCTIONAL MATERIALS FOR THE TRAINING OF LAW ENFORCEMENT OFFICERS. INITIAL CURRICULUM STUDY. Green, Ralph and Schaeffer, Geraldine. New Jersey State Department of Education, Trenton. Division of Vocational Education. 1967. 87p. EDRS Order Number ED 025 645, price in microfiche $0.50, in hard copy $4.45.

A literature review was completed on police functions, police training, basic police training curriculums, professional police journals, and curriculum textbooks. Chapter titles are "Description of the Distribution of Police Training", "The Basic Police Training Curricula", "The Evaluation of Curricula".

405. AN ANALYSIS OF THE CUSTODIAL TRAINING PROGRAMS IN INDIANA SCHOOL CORPORATIONS. Wargo, John George, Jr. Indiana University. Ed.D.Thesis. 1967. 126p. University Microfilms Order Number 68-4757, price in microfilm $3.00, in Xerography $6.20.

Custodial training programs were surveyed and analyzed in Indiana to determine number employed, assess attitudes of school administrators toward training of custodians, locate school corporations with custodial handbooks, and ascertain opinions of administrators regarding custodial services.

6700 Agriculture, Home Economics

406. AN ECONOMIC STUDY OF THE INVESTMENT EFFECTS OF EDUCATION IN AGRICULTURE. FINAL REPORT. Persons, Edgar A. and others. Minnesota University, St. Paul. EDRS Order Number ED 021 989, price in microfiche $0.75, in hard copy $8.85.

To determine benefit-cost ratio of the educational program for participants and the sponsoring community, data were collected from farmers enrolled in farm business management education in 1959-65. Farmers participating were younger, better educated, and more affluent than the average farmer. Farmer's labor earnings and farm sales increased rapidly during the first three years of instruction, declined for the fourth, fifth, and sixth years and then increased rapidly in subsequent years. The benefit-cost ratio for individual farmer participants was 4.20:1. The community benefit-cost ratio when icnreased business activity was measured by increased farm sales was 9.00:1.

407. THE DEVELOPMENT OF A MODEL DESIGN TO ASSESS INSTRUCTION IN FARM MAMAGEMENT IN TERMS OF ECONOMIC RETURNS AND THE UNDERSTANDING OF ECONOMIC PRINCIPLES. Rolloff, John August. 155p. University Microfilms Order Number 67-6364, price in microfilm $3.00, in Xerography $7.80.

The records of farm operators in farm business analysis programs in 5 Ohio schools were studied to test a model for determining the influence of the farm business

analysis phase of vocational agriculture instruction in farm management. Economic returns were measured as ratios between 1965 program inputs and outputs determined by change in net farm income between 1964 and 1965. In pilot trial the test group showed: (1) an improved mean change in test scores, (2) increased economic efficiency in the farm business, (3) a positive association between understanding of profit maximizing economic principles and changes in economic efficiency, and (4) a $53.16 increase in net farm income for each $1.00 expended by farmers on instruction.

408. INVESTMENTS IN EDUCATION FOR FARMERS; SUMMARY OF AN ECONOMIC STUDY OF THE INVESTMENT EFFECTS OF EDUCATION IN AGRICULTURE. Persons, Edgar A. and others. Minnesota University, St. Paul. January 1968. 54p. EDRS Order Number ED 021 951, price in microfiche $0.25, in hard copy $2.80.

To examine the relationships between costs and benefits, an instructional program in farm business from 1959-65 was considered as the educational investment, and benefits were assessed by examining business records of enrolled farmers. A benefit-cost analysis revealed: (1) A farmer can realize about $4 of labor earnings for each dollar of investment in educational programs, (2) Where the benefits to the community were calculated as an aggregate rise in farm labor earnings and the cost included the aggregate cost borne by the community the ratio was approximately 2:1; where the cost included farm sales as a measure of business activity the ratio was 9:1, (3) Diminishing marginal return effects were observable in educational investments, (4) Over the 6-year period the cost effectiveness of the educational program was not constant.

409. A STUDY OF FACTORS ASSOCIATED WITH OUTCOMES OF MDTA AGRICULTURAL EDUCATION PROJECTS IN THE SOMERSET AREA. FINAL REPORT. Gough, Lowell A. and Rowe, Harold R. Kentucky Research Coordinating Unit, Lexington; Kentucky State Department of Education. January 1968. 25p. EDRS Order Number ED 021 130, price in microfiche$0.25, in hard copy $1.35.

Three Manpower Development and Training Act agricultural courses were evaluated to determine whether they are a good investment for training farm workers to provide products for a diversified farm market. Approximately 97 percent of former general program trainees, 90 percent of the farm hand program trainees, but only 5 percent of the gardener program trainees were employed in the type of job for which they were trained. The annual gross income of the trainees before entering the program averaged $700 and the weighted average of all incomes reported by employed trainees after 3 months, 6 months, and 1 year was approximately $2,500 per year. The cost of MDTA farmer general program is realizable within 3 years of the training.

410. EVALUATING THE UNIT APPROACH--FARM AND HOME DEVELOPMENT. (Title supplied). Mayer, Ralph E. and Rieck, Robert E. June 1967. In Journal of Cooperative Extension v5 n2 Summer 1967.

The 1954 Federal Extension Appropriation Bill authorized a personal contact, family unit approach called Farm and Home Development, (FHD). The FHD agent worked with the farmer and his wife in an educational porgram which considered family goals, economic implications of farm adjustment, and production alternatives. Data collected in 1964 from 36 Wisconsin counties that had carried FHD indicated cooperating families showed more improvement in the decision making process, developed greater technical interest in farming, and displayed a keener ability to analyze the economic aspects of typical farm decisions than did the control families. FHD families also generally made greater financial gains than the average gain made by all Wisconsin farm families.

411. EDUCATION REGARDING CREDIT FOR AGRICULTURAL PRODUCTION. REPORT NO. 2, SURVEY OF TEACHERS OF AGRICULTURE. Phipps, Lloyd J. and others. Illinois University,

Urbana, Division of Agricultural Education. May 1967. 19p. EDRS Order Number ED 018 638, price in microfiche $0.25, in hard copy $1.05.

Agriculture teachers who had received 3 days of intensive instruction in farm management and randomly selected teachers with more than 1 year of experience identified study areas related to the use of agricultural production credit and educational references and teaching aids being used in high school and adult programs. The purpose of the survey was to develop instructional units for teaching agricultural production credit.

412. SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION, CENTRAL REGION, 1964-1966. Warmbrod, J. Robert. Illinois University. July 1967. 82p. EDRS Order Number ED 015 338, price in microfiche $0.50, in hard copy $4.20.

413. AGRICULTURAL EDUCATION IN YUGOSLAVIA. Buila, Theodore. Cornell University. Ph. D.Thesis. 1968. 324p. University Microfilms Order Number 68-15,709, price in microfilm $4.15, in Xerography $14.65.

A study was made of agricultural education and manpower development in Yugoslavia. The rise of elementary agricultural education (1780-1918), the emergence of upper level and extension instruction (1918-40), and postwar expansion were covered. Major findings included: (1) 80% of the 1961 and 1966 graduates were employed in agricultural occupations; (2) over 72% of graduates resided within 25 kilometers of their childhood homes; (3) occupational dissatisfaction was most often expressed in terms of lack of modern equipment, limited recreational facilities, shortage of modern housing, and low salary; (4) occupational prospects for agricultural graduates were uncertain. Among the key issues are developing programs to serve the new generation of private farmers, continued improvement of formal and adult-oriented programs, establishing agricultural teacher and extension agent programs, and forming an occupational placement program for graduates.

414. A STUDY OF RESEARCH UTILIZATION PROCESSES IN BRITISH AGRICULTURE. Bruce, R.L. New York State University, Ithaca. College of Agriculture at Cornell Proj-621. February 1969. 14p. Paper presented at the National Seminar on Adult Education Research (Toronto, February 9-11, 1969). EDRS Order Number ED 025 717, price in microfiche $0.25, in hard copy $0.80.

To develop a model for describing processes by which agricultural research findings are put into practice. three categories (events, process, and decision) were used. Data suggested the existence of information efforts activated by both supply and demand; the existence of separate processes was neither proved nor disproved. Supply-activated aspects of research utilization need better analysis. All narrations are now being flow-charted for study of relationships within the process. Collection of comparable data in other countries is also planned.

415. A STUDY OF UNIT I FARM MANAGEMENT SCHOOLS IN SOUTHEAST VIRGINIA AND FARM OPERATORS' ADOPTION OF SELECTED FARM MANAGEMENT PRACTICES TAUGHT. Taylor, Eugene W. Virginia Polytechnic Institute, Blacksburg. M.S.Thesis. 1968. 91p. Available from Virginia Polytechnic Institute, Blacksburg, Virginia 24061.

To evaluate the Extension Farm Management Schools in Southeastern Virginia in terms of adoption of 11 practices relating to fertilizer use, record keeping, budgeting and labor management, fifty-eight interviews were conducted. Major findings were: (1) over 43% of the farm operators adopted all 11 practices; (2) the 30-39 age group had the highest rate of adoption; (3) adoption increased with higher education; (4) farmers with the most frequent contact with Extension had the highest adoption ratios; (5) adoption increased along with farm size up to the 501-600 acre range, then decreased; (6) membership in farm organizations bore little or no relationship to adoption; (7) 84% felt that the management schools were of de-

finite value.

416. PRACTICES ADOPTED, INTERESTS, AND INFORMATION SOURCES OF FARMERS AND THEIR WIVES IN TIOGA COUNTY. EXTENSION STUDIES NO. 37. Brown, Emory J. and others. Pennsylvania State University, University Park. College of Agriculture. September 1968. 19p. EDRS Order Number ED 024 874, price in microfiche $0.25, in hard copy $1.05.

Farm families were interviewed to determine the use of recommended practices, interests of the farmers and their wives, and sources of information. Dairy farming was the major enterprise for 3/4 of the farmers. No extension recommendations were used by 15% but 20% used seven or more of the nine recommendations. Farmers were most interested in learning about fertilizer, dairy herd management, milk marketing, and soil conservation; newsletters, visits from the county agent, weekly newspapers, and farm magazines were the most popular sources. High participation in Extension correlated with a larger herd, a larger farm, an older farmer, better farm business records, and a wife who participated. Farmers' wives were most interested in interior decorating and educational opportunities and careers for children. Wives preferred a newsletter and newspapers for information and were almost all very low Extension participators.

417. THE COMPUTER AND LINEAR PROGRAMMING AS IMPORTANT INSTRUMENTS FOR DECISION MAKING ASSISTANCE FOR FARMERS. Harter, Walter George. Ohio State University, Columbus. Ph.D.Thesis. 1967. 186p. University Microfilms Order Number 68-8832, price in microfilm $3.00, in Xerography $8.60.

This was a study to determine if individual linear programs could be made for a group of farmers with varied organizational problems; if extension agents could be trained to collect data for linear programing; and whether the results would be acceptable to farm managers. Extension agents received training in data collection, then interviewed farmers who were assumed to have complete farm records, were planning changes, and would cooperate. After a few farms had been programed and the results reported, the farmers were presented with two or more solutions. The first (Income over variable expenses) was based on the current farm organization; a modified matrix included one or more activities concerning special organizational questions asked by the farmers. Findings on the value of linear programing, on agents as programers and interviewer-counselors, and on the acceptance of programing tended to be affirmative.

418. NATIONAL SURVEY OF WAGE EARNING HOME ECONOMICS COURSE DEVELOPMENT. NRCUVT SERIES, NO.4. Joern, Judith B. Nebraska Occupational Needs Research Coordinating Unit, Lincoln. October 1968. 19p. EDRS Order Number ED 023 915, price in microfiche $0.25, in hard copy $1.05.

State supervisors of home economics education were surveyed to determine the extent to which home economics wage earning programs have been developed. Most states had home economics wage earning programs, with food and clothing service areas predominant. The bulk of the courses were found at the secondary and adult levels. In many states the areas of child care, institutional and home management, and health related occupations are being developed. Approximately 150 home economics wage earning courses were offered at the secondary level, post-high and adult level during 1964-65; nearly 1,300 courses were offered in 1967-68.

419. FEES FOR HOME ECONOMICS LEADER TRAINING AND TEACHING OF SPECIAL GROUPS; COUNTY HOME ECONOMICS DIVISIONS, NEW YORK COOPERATIVE EXTENSION. SPECIAL REPORT, NO. 16. Alexander, Frank D. and Engelbrecht, Walda M. New York State University, Ithaca, College of Agriculture at Cornell University. August 1968. 26p. EDRS Order Number ED 021 200, price in microfiche $0.25, in hard copy $1.40.

To determine the fee practices of county home economics divisions with regard to

leader training and teaching of special interest groups, questionnaires were received from 52 home economics divisions. Of this number, 23 divisions had a fee policy and 24 others lacking such a policy gave eight classes of reasons for not having one. Data were obtained on sources of fees, collection, duration of fee policies, length of regular training classes, class attendance, special interest classes, agents' evaluations (largely favorable) of the effects of fee policies, and members' complaints (apparently very few) about fees for special interest classes.

420. HOME ECONOMICS RESEARCH ABSTRACTS--1966. HOME ECONOMICS EDUCATION. Mather, Mary E., Ed. American Home Economics Assn., Washington, D.C. 1967. 92p. EDRS Order Number ED 021 058, price in microfiche $0.50, in hard copy $4.70.

111 abstracts of master's and doctoral research in home economics education, completed in 1966 are classified according to (1) administration, (2) program planning-secondary, college, and adult, (3) evaluation-secondary, college, and adult, (4) methods and materials, (5) teacher education, and (6) miscellaneous. Available for $1.50 from American Home Economics Association, 1600 Twentieth Street N.W., Washington, D.C. 20009.

See also: 2230 RURAL COMMUNITIES; 7000 HOME, FAMILY, PARENT EDUCATION; 7600 COOPERATIVE AND RURAL EXTENSION.

6750 Assembly, Maintenance Occupations

421. ELECTRONIC TECHNICIAN PERSONNEL AND TRAINING NEEDS OF IOWA INDUSTRIES. Weede, Gary Dean. Iowa State University of Science and Technology. 1967. 38p. EDRS Order Number ED 020 314, price in microfiche $0.25, in hard copy $2.00.

422. R&D: WHAT INDUSTRY CAN LEARN FROM RESEARCH IN ARMY ELECTRONICS AND ELECTRICAL MAINTENANCE TRAINING. McClelland, W. A. 8p. In Training in Business and Industry v6 n1 p36-40 January 1969.

Functional context training (FCT) concentrates on better maintenance through structuring of the troubleshooting process. FCT attempts to improve the congruence of instructional materials, training, and equipment, and implies modification of the personnel and training subsystem for the effective use of personnel and money. It entails establishing a maintenance oriented context, following a whole-to-part sequence, and presenting a graded series of job-related tasks. Contributions to job performance, transfer of training, cost reduction, and the development of training programs and materials have come from several HumRRO projects. With adequate systems analysis and assessment of training needs, the FCT approach is also relevant to industrial training.

423. COLLECTED PAPERS PREPARED UNDER WORK UNIT FORECAST; DEVELOPMENT OF A METHOD OF FORECASTING TRAINING DEMANDS IMPOSED BY NEW ELECTRONIC WEAPON SYSTEMS. McClelland, William A. and others. George Washington University, Washington, D.C. HumPRO. 1968. 43p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-673-026, price in microfiche $1.65, in hard copy $3.00.

Research in the electronics maintenance is discussed in this publication. The forecasting of training requirements for new weapons systems, task analysis for an experimental weapon system training program, the use of low-cost electronics maintenance into the functions of planning and execution are among the topics treated.

425. A PERFORMANCE-ORIENTED ELECTRONICS TECHNICIAN TRAINING PROGRAM. IV. FLEET FOLLOW-UP EVALUATION OF GRADUATES OF ALL CLASSES. Steinemann, John H. and others. U.S. Naval Personnel Research Activity, San Diego, California. October 1967. 37p.

Clearinghouse for Federal Scientific & Technical Information Order Number AD-666-565, price in microfiche $0.65, in hard copy $3.00.

A study was made of the job proficiency of the graduates of an experimental job oriented training course for electronics technicians, designed to train lower aptitude personnel. The majority in both groups could work on equipment with only limited supervision and summary ratings for both groups on 35 job tasks were within the 75-100 percent range of successful, unsupervised task completion.

426. AN EXPERIMENT IN BASIC AIRBORNE ELECTRONICS TRAINING. PART 5: EVALUATION OF THE REVISED COURSES. Baldwin, Robert O. and Johnson, Kirk A. Naval Personnel Research Activity, San Diego, California. June 1968. 21p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-671-185, price in microfiche $0.65, in hard copy $3.00.

This is the fifth in a series on shortened versions of the Avionics Fundamentals and Aviation Electronics Technician R (Radar) Courses. Students in the 8.5 week version of the course did just as well as students in the original 10.8 week version of the course. Students in the 16 week version of the Avionics Fundamentals course were found to be slightly inferior to students in the original 19 week version.

427. PREDICTION TABLES FOR AVIONICS FUNDAMENTALS COURSE, CLASS A. Baldwin, Robert O. and Johnson, Kirk. Naval Personnel Research Activity, San Diego, California. 1968. 32p. Clearinghouse for Federal Scientific & Technical Information Order Number AD-665-288, price in microfiche $0.65, in hard copy $3.00.

428. AN EVALUATION OF A TRAINING PROGRAM IN INDUSTRY. White, Stroller Tod. Minnesota University, Minneapolis. Ph.D.Thesis. June 1967. 149p. University Microfilms Order Number 67-14,666, price in microfilm $3.00 in Xerography $7.00.

This study investigated the extent to which the Analytic Trouble Shooting Program (ATS) trained troubleshooters in an automobile assembly plant (1) to use information about a problem to determine the cause of that problem and (2) to anticipate and prevent problems.

6800 Structural Work Occupations

429. SELECTING THE OLDER TRAINEE, A PILOT STUDY OF TRAINABILITY TESTS. Downs, Sylvia. Industrial Training Research Unit, Cambridge (England). 8p. In NIIP Bulletin, p19-26 May 1968.

To determine the predictability of a trainability test in carpentry and welding. trainees over a broad age range completed a trainability test following a short period of instruction similar to that used in training courses. Those with good test scores succeeded in the course; most younger men whose test scores were poor also succeeded in training; and older men with poor test scores were not successful.

6850 Other Occupations

430. SURVEY OF POTENTIAL FOR TRAINING, RETRAINING, AND EDUCATION OF HEALTH SERVICES PERSONNEL, PUBLIC LAW 89-785, APRIL 1, 1967. Ad Hoc Committee-Council of Teaching Hospitals of the Association of American Medical Colleges. [1968]. 99p. EDRS Order Number ED 027 451, price in microfiche $0.50, in hard copy $5.05.

Veterans Administration hospitals were asked to report their potential for health

services manpower training. Information appropriate to any local Veterans Administration hospital setting is tabulated for 36 professional and 80 non-professional probable training areas, with details such as target skill, pre-requisites, course length, source of academic education, number of trainees per course with present and additional facilities, staff needs, equipment needs, space needs, tuition or stipend per trainee, certificate or degree at end of course, and source of recruitment.

431. A PICTORIAL ATTITUDE TEST FOR THE EVALUATION OF IN-SERVICE TRAINING PROGRAMS. Stoer, Leopold. California State Department of Mental Hygiene. 14p. In Journal of Projective Techniques and Personality Assessment v31 n6 p74-87 December 1967.

432. ANNOTATED BIBLIOGRAPHY ON INSERVICE TRAINING IN MENTAL HEALTH FOR STAFF IN RESIDENTIAL INSTITUTIONS. National Institute of Mental Health, Chevy Chase, Maryland, Community Mental Health Centers Staffing Branch. 1968. 46p. EDRS Order Number ED 023 990, price in microfiche $0.25, in hard copy $2.40.

Annotated bibliography of periodical literature through August, 1967 inservice mental health training for personnel in residential institutions.

433. IN-SERVICE TRAINING FOR PROBATION, PAROLE AND CORRECTIONAL PERSONNEL. Brewer, Donald D. and Blair, Carol Ann. Georgia University, Athens, Institute of Government. February 1968. 128p. EDRS Order Number ED 025 687, price in microfiche $0.50, in hard copy $6.50.

A profile of employees in the Georgia correctional system revealed an average age of 46, a mean salary of $5,135, relatively brief service, under half with related work experience, an average of 11 years of school, heavy work loads, limited opportunities, and heavy concentrations in metropolitan centers. Provisions for the training were highly inadequate. A systematic plan of education has been proposed for technical on-the-job training, training institutes, and formal higher education. It is proposed that university, governmental, and other training resources of the state be mobilized. Phases of program implementation include content and methods development, direct training, employee self-improvement, improved salaries and advancement opportunities, an intern program, research and evaluation, joint planning, and several categories of training project personnel.

434. FACTOR ANALYSIS OF AVIATION TRAINING MEASURES AND POST-TRAINING PERFORMANCE EVALUATIONS. Booth, Richard F. and Berkshire, James R. Naval Aerospace Medical Institute, Pensacola, Florida. October 1968. 18p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-681-794, price in microfich $0.65, in hard copy $3.00.

To relate the factor structure of naval air training measures to the performance of Marine pilots in operational squadrons, five post-training criteria were developed; four were Commanding Officer (C.O.) nominations of junior officers for hypothetical special assignments, and the fifth was a general satisfactory/unsatisfactory C.O. evaluation of each junior officer's squadron performance. Academic ability, flying skill, and systems comprehension factors were found in separate analyses for jet and helicopter pilots. The four C.O.nominations were loaded on a single nomination factor that was essentially unrelated to training measures in either sample. The satisfactory/unsatisfactory criterion, however, was directly related to a jet pilot's overall flying skill and inversely related to the performance of a helicopter pilot early in flight.

435. THE FEASIBILITY OF ESTABLISHING A PROGRAM TO TRAIN COMPUTER PROGRAMMERS UTILIZING A TIME-SHARING SYSTEM AND REMOTE DATA-COMMUNICATIONS TRANSMISSION TERMINALS. Hardwick, Arthur Lee. Oklahoma State University. Ed.D.Thesis. 1968. 182p. University Microfilms Order Number 66-8416, price in microfilm $3.00 in Xerography $8.40.

436. COLLECTED PAPERS PREPARED UNDER WORK PROJECT LIFT: ARMY AVIATION HELICOPTER PILOT TRAINING. George Washington University. HumRRO. June 1968. 828p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-673-936, price in microfiche $0.65, in hard copy $3.00.

Results of studies to develop more efficient methods for Army helicopter pilot training are discussed.

437. ON-THE-JOB TRAINING PROGRAM FOR LIBRARY AIDES WORKING IN QUEENS BOROUGH PUBLIC LIBRARY, Jamaica, New York. 30p. EDRS Order Number ED 022 522, price in microfiche $0.25, in hard copy $1.60.

College graduates or undergraduates called Library Aides, are trained for work with the Operation Head Start program through an individual on-the-job method of instruction.

438. SURVEY OF LIBRARY PERSONNEL IN SIERRA COLLEGE EMPLOYMENT AREA. Young, Elma L. Sierra College, Rocklin, California. 15 April 1968. 14p. EDRS Order Number ED 020 716, price in microfiche $0.25, in hard copy $0.80.

A survey of libraries in the employment area of the college was made to determine needs for library technicians.

439. BACKGROUND AND SITUATIONAL CONFIDENCE; THEIR RELATION TO PERFORMANCE EFFECTIVENESS. Boyles, Wiley R. George Washington University, Washington, D.C. HumRRO. June 1968. 19p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-674-943, price in microfiche $0.65, in hard copy $3.00.

Inventories to measure confidence in dangerous situations were given to potential Army aviation warrant officers. These paper-and-pencil inventories are based on a clinical-experimental fractional anticipatory response conceptualization of reactions to the psychological stresses of combat. Military performances of the men were subjected to longitudinal analysis to determine the relationship of scores on these inventories to various criterion performances. Relationships of scores on two inventories--the Background Activities Inventory and the Situational Confidence Inventory--to peer ratings, attrition during flight training, and accident information, are presented.

440. RELATIONSHIP BETWEEN TRAINING PROGRAMS BEING OFFERED IN STATE AND FEDERAL PENAL INSTITUTIONS AND THE UNFILLED JOB OPENINGS IN THE MAJOR OCCUPATIONS IN THE UNITED STATES. Torrence, John Thomas. June 1967. 47p. Available from Interlibrary Loan Service, University Libraries, Kansas State College of Pittsburg, Pittsburg, Kansas 66762 ($4.80).

The 285 institutions which responded accounted for over 225,000 of the 230,000 inmate population in the United States. The 107 nonresponding institutions were small and it was assumed that they have no training programs. Comparison of unfilled job openings and penal institution training areas revealed that only 20 out of 99 institutional training programs were related to unfilled job openings on the national level. Among the conclusions drawn were that training programs were organized to meet the service and maintenance needs of the institution rather than the post-release opportunities of the inmate, and that the wide variety of names assigned to the various courses in the training programs indicated that liaison between the various state employment agencies and the institutions was limited.

441. TRAINING NEEDS IN CORRECTIONAL INSTITUTIONS. MANPOWER RESEARCH BULLETIN 8. Collins, Joseph W., Jr. and Weisberg, Richard. United States Office of Manpower Policy, Evaluation, and Research, Washington, D.C. April 1966. 22p. EDRS Order Number ED 025 601, price in microfiche $0.25, in hard copy $1.20. Also available from Manpower Administration, U.S.Department of Labor, 14th Street and Constitu-

tion Avenue, N.W., Washington, D.C. 20210.

This report presents an analysis of the training needs of inmates in correctional institutions. The bulletin presents a profile of characteristics of prison inmates and analyzes some of the handicaps they face in the job market. Although more than 100,000 persons leave Federal and State prisons each year, few of them receive the kind of training in prison which would enable them to compete successfully for jobs. At least one-third of all releases from Federal and State correctional institutions return as prisoners. Specific topics covered in this report include: the kinds of jobs held before imprisonment, the training and education available in correctional institutions, and the employment experience of releases.

442. THE DRAPER E&D PROJECT. FINAL REPORT. Rehabilitation Research Foundation, Elmore, Alabama. Draper Correction Center. August 1968. 249p. EDRS Order Number ED 023 142, price in microfiche $1.00, in hard copy $12.55.

The Draper Project demonstrated the feasibility of operating a manpower training program in a correctional setting. However, education and training per se are not enough to effect the broad changes in inmates required for successful social adjustment. A regular free-world manpower program should not be simply transplanted. Prisoners are a special group of disadvantaged persons; prisons are unique social institutions. Successful implementation of a program is contingent upon: (a) institutional attitude; (b) strong support of correctional management; (c) effective agency coordination; (d) staff training, development, and flexibility; and (e) effective public relations.

443. RESTORATION OF YOUTH THROUGH TRAINING, A FINAL REPORT. Sullivan, Clyde E, and Mandell, Wallace. Wakoff Research Center, Staten Island, New York. April 1967. 409p. EDRS Order Number ED 016 138, price in microfiche $1.75, in hard copy $20.55.

To provide vocational training for young jail inmates and to evaluate their subsequent performance upon release, inmates were randomly assigned to an experimental and a control group. The control group followed ordinary jail routine, and the experimental group received data-processing machine training, remedial reading instruction, individual counseling, post-jail supportive service, and job placement assistance. Differences between experimental and control groups favored the former group in (1) non-return to jail, (2) non-return to jail even if addicted to drugs, (3) new job opportunities upon release, (4) social mobility as evidenced by job level, (5) reduction in incidence of physical labor jobs, (6) increase in jobs with promotion potential, (7) increase in jobs where job training was available and (8) increased tenure with firms hiring inmates upon release.

444. AN INVESTIGATION OF THE EFFECTS OF SPECIAL IN-SERVICE TRAINING PROGRAMS FOR WORK WITH DISADVANTAGED CHILDREN AS VIEWED BY DIRECTORS AND PARTICIPANTS. Ponder, Edward Gene. Columbia University. Ed.D.Thesis. 1967. 285p. University Microfilms Order Number 68-2437, price in microfilm $3.70, in Xerography $12.85.

A followup study of twelve NDEA Institute programs, from preschool through grade six, was made. The formal class sessions and/or seminars (including T groups), coordinated with practicum, were helpful to participants. Respondents seem to evidence carry-over from the institute experiences into their subsequent work in six areas. Based upon a frequency count, in descending order, they are: classroom procedures, parent-community relations, sociopsychological characteristics of disadvantaged children, administrative and organizational structure of schools, materials of instruction, and inservice education. However, respondents had difficulty in transmitting their newly acquired techniques and experiences.

6900 LIBERAL EDUCATION

445. LEISURE AND EDUCATION FOR LEISURE: A STUDY OF AN EMERGING PRIORITY. Kimball, Kenneth Robie. New York State University, Albany. Ed.D.Thesis. 1967. 220p. University Microfilms Order Number 68-5271, price in microfilm $3.00, in Xerography $9.90.

A literature survey confirmed leisure as a growing social force. Survey respondents (185 heads of households in Albany County, New York) were largely married men with 12 or more years of education; 58% were in professional, managerial, clerical, or sales positions. Play activities were preferred by 57% to entertainment, making or fulfillment activities. The group indicated that the home, school, and church, in that order, are assuming or should assume major roles in preparation for leisure. Respondents were divided on the statement that "education for leisure has become as important as education for work", with stronger reactions coming from those who disagreed with the statement. The home was found lacking in preparing youth for leisure, and intensified efforts by educative agencies were urged.

446. FACTORS AFFECTING PARTICIPATION BY ADULTS IN COMMUNITY EDUCATIONAL ACTIVITIES CONCERNED WITH THE CULTURAL ARTS. Warlum, Michael Frank. Wisconsin University. Ph.D.Thesis. 1967. 157p. University Microfilms Order Number 67-6844, price in microfilm $3.00, in Xerography $7.20.

The study seeks to describe factors which are related to adult participation in a community-wide cultural arts project involving considerable volunteer effort. With one exception, the null hypotheses tested failed to be rejected. The rejected hypothesis, dealing with nationality, showed a significant difference. People of the ethnic group emphasized by the festival showed greater aptness to participate than people who were not of this ethnic group.

447. AN EXPERIMENTAL PUBLIC EDUCATION PROGRAM IN MENTAL HEALTH. Arnold, Hubert Merrell. Ph.D.Thesis. 1967. 128p. University Microfilms Order Number 68-2259, price in microfilm $3.00, in Xerography $6.20.

This study was made of an experimental adult education program and its effect on the general public's knowledge of and attitudes toward mental illness and related concepts. The program was based on freedom of expression, active involvement, and voluntary participation. Experimental subjects took part in the educational program, a session a week for three weeks. The control group received no treatment. High knowledge levels were not related to positive attitudes, nor were low levels related to negative attitudes. The experimental program significantly increased knowledge levels without increasing positive attitudes.

448. ADULT EXPERIENCE; A KEY TO CHRISTIAN DISCIPLESHIP. PUTTING IMMEDIACY AND EMOTIONAL CONTENT INTO A CHRISTIAN THEOLOGY SPECIFICALLY FOR ADULTS. Thede, Gaius Wendt. Pacific School of Religion, Berkely, California. Th.D.Thesis. 490p. University Microfilms Order Number 66-4471, price in microfilm $6.25, in Xerography $22.05.

The first problem of a Christian educator in reaching adults is motivation. Although educational psychology shows little beyond self-realization as the basic motive of man, the Christian view makes it clear that God's own motivation, agape (self-giving love), is also meant for man and is the only adequate motivation. Philosophers like Polanyi now recognize the necessity of involvement for any knowledge. Religious knowledge demands more complete commitment and greater personal risk, making decision more difficult. We propose a Christian "commitment theology" as the content of Christian adult education. We can approach adults on the basis, not of intellectual acuity, but of a "maturity" due to life lived; the Christian educator's role is not as God-substitute but as bystanding "introducer"; and the basic content can be "existential theology", centering on the Fatherhood of God.

449. A COMPARATIVE STUDY OF THE THEOLOGICAL CONCEPTS OF THE 1964-65 ADULT PARISH EDUCATION CURRICULUM OF THE LUTERAN CHURCH IN AMERICA AND THE ADULT AUGSBURG UNIFORM SERIES. Sperling, Gordon James. New York University. Ph.D.Thesis. 1967. 161p. University Microfilms Order Number 67-11,129, price in microfilm $3.00, in Xerography $7.60.

This research aimed at analyzing the theological concepts in the adult sections of the Lutheran Church Parish Education Curriculum series, evaluating them in terms of the theology of the Lutheran church, and comparing them with the Augsburg Uniform Lesson Curriculum Series for adults.

See also: 5400 ADULT HIGHER EDUCATION-ACADEMIC PROGRAMS; 7050 ARTS, CRAFTS, RECREATION; 7150 CROSS CULTURAL EDUCATION; 2 historical review of literature of liberal adult education; 11 history of Lyceum; 12 history of Chautauqua; 58 cross cultural study of adult attitudes and participation in public affairs; 194 influence of foreign visitors on host community; 195 mass media in liberal education programs; 354 workers education in Britain compared to labor education in U.S.; 481 adult education philosophy of the Anglican Church of Canada; 485 folk high schools in Sweden; 489 role of WEA in administration of adult education in New Zealand.

7000 HOME, FAMILY, PARENT EDUCATION

450. A STUDY OF THE KNOWLEDGE AND ATTITUDES OF THE MIDDLE AND UPPER-MIDDLE INCOME CLASS URBAN DWELLER TOWARD CHEMICAL PESTICIDES. Bush, Madge Morgan. Virginia Polytechnic Institute, Blacksburg. M.S.Thesis. November 1968. 133p.

A study was made of middle income urban dwellers to determine their knowledge and attitude toward pesticides. The sample scored approximately 70% on the knowledge questions and approximately 30% on questions pertaining to government regulations. General attitude was more favorable than that toward government regulation of pesticides. Mean educational level was 12.5 years. Mean age was 49.7. Extension programs on pesticides should emphasize the role of government regulation. Extension programs should be tailored to appeal to the high educational level and broad special interest activities of this urban audience.

451. CHANGE AND PROGRESS, A COMPARATIVE STUDY: HOUSING PROJECT SURVEY 1964-1966, St. Louis, Missouri. Hunter, Starley. Missouri University. [1967]. 48p. EDRS Order Number ED 023 979, price in microfiche $0.25, in hard copy $2.50.

A survey was made of sample populations in a public housing project in St. Louis, to find family characteristics, homemaking practices, and the effects of extension classes in home management and family economics, clothing, and food and nutrition. Participants in the homemaking classes had a higher proportion of two parent families, were between 30 and 59 years of age, had incomes of $2,000 or more, had two full time or one or two part time workers, had larger families, spent more for food but did not have higher quality diets, and knew of Medicare and educational and recreational facilities. The most effective means of spreading information about extension classes had been flyers and leaflets, followed by television, newspapers, and the Housing Digest.

452. VOLUNTEER STUDY GROUPS; CHARACTERISTICS AND EDUCATIONAL FUNCTIONS; HOME DEMONSTRATION UNITS IN ONONDAGA COUNTY. EXTENSION STUDY NO.18. Alexander, Frank D. Cornell University, College of Agriculture. October 1968. 204p. EDRS Order Number ED 026 558, price in microfiche $1.00, in hard copy $10.30.

The study aimed at describing the characteristics of a sample of home demonstra-

tion units in Onondaga County; testing the effectiveness of the teaching of a selected project; relating characteristics of the units to the learning of the participants; comparing characteristics of project leaders, trained teachers, and members of the unit; and indicating the leaders' preparation for teaching the project. Information was collected through interviews, pre- and posttests, and lesson reports from project leaders. Covariance of analysis was used to correlate learning and characteristics of the units as derived from personal characteristics of members, and only one of nine categories was significant at the .05 level.

453. EVALUATION OF SELECTED ASPECTS OF THE HOMEMAKING SERVICE PROGRAM IN THE CITY OF ROCHESTER, NEW YORK. Alexander, Frank D. New York State University, Ithaca, College of Home Economics at Cornell University. October 1968. 147p. EDRS Order Number ED 023 050, price in microfiche $0.75, in hard copy $7.45.

To describe the characteristics of teaching homemakers and of the women with whom they worked; to indicate the influence of training on the teaching homemakers; and to show the training program input, data were collected through a variety of other methods. Of the fourteen teaching homemakers, eleven were Negroes and three Puerto Ricans. The mean age was 37.4, schooling ranged from 5 to 14, and one half lived in homes owned by their families. Ten women were married, three divorced or separated, and one single. Stated also are the occupations of husbands and wives, mobility, participation, and family income. Recommendations include longer and unbroken periods, more group teaching, supervision of teaching homemakers, survey of participants' interests, and greater attention to training in methodology.

454. EVALUATION OF FAMILY SERVICE PROGRAM, HOME ECONOMICS DIVISION OF COOPERATIVE EXTENSION, CLINTON COUNTY, NEW YORK. Supplement to Extension Study Number 15. Alexander, Frank K. New York State University, Ithaca. College of Home Economics at Cornell University. February 1968. 35p. EDRS Order Number ED 017 836, price in microfiche $0.25, in hard copy $1.85.

Combined data on third and fourth cycle lessons of the Family Service Program were used to study the characteristics of the participants and to evaluate the teaching. Place of residence, home ownership, age, educational level, marital status, family composition, employment, mobility, income and participation were among characteristics discussed. Both groups had a larger percentage of urban participants, fewer women from owner families, a lower median age, and a greater number of persons per household than the average county or rural populations. The high ratings of lessons indicated satisfaction and test scores show gains in knowledge.

455. AN IDENTIFICATION OF EFFECTIVE METHODS TO EMPLOY IN CONDUCTING AN EDUCATIONAL PROGRAM TO REACH AND TEACH LOW-INCOME YOUNG HOMEMAKERS IN RURAL AREAS. Priester, Jeanne. Auburn University, Alabama. February 1968. 12p. Paper presented at the National Seminar on Adult Education Research (Chicago, February 11-13, 1968). EDRS Order Number ED 017 889, price in microfiche $0.25, in hard copy $0.70.

Nonprofessional assistants conducted programs for low income homemakers in five Alabama counties, supervised by the county home economist. The working visit, a one-to-one teaching method in the homemakers' home, taught by telling, showing, and repeating a skill. A second method utilized small informal groups which met according to individual plans and needs. A low-reading-level newsletter was published for use in both methods. Daily logs were kept of each homemaker. Personalized informal learning experiences helped deprived young homemakers raise their level of living, encouraged mothers and families to grow out of the relief cycle, and raised self esteem and aspirations.

456. INTERDISCIPLINARY APPROACH TO PREPARING HOME ECONOMICS LEADERS FOR EMERGING PROGRAMS SERVING DISADVANTAGED YOUTH AND ADULTS. FINAL REPORT. APPENDIX B. Garrett,

Pauline Gillette. Missouri University. May 1967. 108p. EDRS Order Number ED 016 833, price in microfiche $0.50, in hard copy $5.50.

457. A PARENT EDUCATION APPROACH TO PROVISION OF EARLY STIMULATION FOR THE CULTURALLY DISADVANTAGED. FINAL REPORT. Gordon, Ira J. Florida University. 30 November 1967. 118p. EDRS Order Number ED 017 339, price in microfiche $0.50, in hard copy $6.00.

458. HEAD START PARENTS' ADULT BASIC EDUCATION PROJECT, NEW YORK CITY. Final Report. Drescher, Ruth. New York State Education Department, Bureau of Basic Continuing Education. U.S. Office of Education, Division of Adult Education Programs. March 1968. 57p. EDRS Order Number ED 018 761, price in microfiche $0.25, in hard copy $2.95.

A 100-hour education project attempted to raise the educational level of parents of Head Start children. No registrants read beyond eighth grade level, most were non English speaking, and 38 percent were native born. Social living and communication skills were taught through films and teacher-prepared and commercial materials. A pilot study in which a bilingual teacher taught reading simultaneously in English and Spanish seemed to facilitate learning. The gains in reading and arithmetic, measured by pre and post tests, were estimated at two school months. Teachers noted improved behavior of children whose parents attended the classes.

459. CHARACTERISTICS OF THE PARENTS SERVED. Rosenblatt, Aaron and Wiggins, Lee M. 9p. In Social Casework v48 n10 p639-47 December 1967.

Characteristics of participants in Project ENABLE (Education and Neighborhood Action for Better Living Environment) were compared with those of heads of families applying to agencies of the Family Service Association of America (FSAA) and members in a parent education project supported by the National Institute of Mental Health (NIMH). An analysis of race, education, income, employment, occupations, and family status showed that Project ENABLE participants differed substantially from the FSAA and NIMH groups. When 72 characteristics of Project ENABLE participants were compared with those of nonattenders and refusers, differences tended to be small, with the largest differences occurring on items classified as voluntary activities and personal attitudes. Except for race, size of city, and education, Project ENABLE dropouts and regular attenders differed by no more than 5% on background characteristics; but greater differences were found on voluntary activities and personal attitudes. Project ENABLE was reaching a relatively deprived client group, was able to recruit group members on a broad basis, but was relatively unsuccessful in retaining Negroes, Mexican-Americans, and persons with under 12 years of schooling.

460. AN APPROACH FOR WORKING WITH MOTHERS OF DISADVANTAGED PRESCHOOL CHILDREN. Karnes, Merle B. and others. Illinois University. 18p. EDRS Order Number ED 017 335, price in microfiche $0.25, in hard copy $1.00.

461. FAMILY RELATIONS AND CHILD DEVELOPMENT; HOME ECONOMICS RESEARCH ABSTRACTS 1967. Purcell, Mary Lou, Ed. American Home Economics Association, Washington, D.C. 1968. 71p. EDRS Order Number ED 026 502, price in microfiche $0.50, in hard copy $3.65. Also available from the American Home Economics Association, 1600 12th Street, N.W., Washington, D.C. 20009 ($1.75).

These 115 abstracts of Family Relations and Child Development research, completed in 1967, were submitted by 34 graduate schools. Child development abstracts have been classified under the topics (1) Infant and Young Child, (2) Elementary School Age Child, (3) Adolescents, and (4) Miscellaneous. Family relations abstracts are categorized under the topics: (1) Adolescents, (2) Adults, (3) Family and Parent-Child Interaction, and (4) Program Development.

See also: 4655 EDUCATION OF WOMEN; 4750-4870 DISADVANTAGED GROUPS; 5230 ADULT BASIC EDUCATION; 5500 COMMUNITY SERVICES AND PROGRAMS; 6700 OCCUPATIONAL TRAINING-AGRICULTURE, HOME ECONOMICS; 205 television in education of urban poor; 162 group methods with mothers of disadvantaged children; 251 pre-retirement education; 255 social roles of middle-aged women; 256 interests and information sources of housewives in Tioga County, Pennsylvania.

7050 ARTS, CRAFTS, RECREATION

462. INDEX OF SELECTED OUTDOOR RECREATION LITERATURE. U.S. Department of the Interior, Washington, D.C. August 1967. 156p. EDRS Order Number 020 905, price in microfiche $0.75. Hard copy available from Government Printing Office ($0.75).

Indexed are 991 periodicals, reports, books, and other publications containing information pertinent to outdoor recreation which were received by the Department of the Interior Library during 1966.

7150 CROSS CULTURAL EDUCATION

463. A COMPARATIVE ANALYSIS OF SUBJECTIVE CULTURE. Triandis, Harry C. and Vassilious, Vasso. Illinois University. October 1967. 72p. Clearinghouse for Federal Scientific and Technical Information Order Number AD-663-889, price in microfiche $0.65, in hard copy $3.70. Prepared in cooperation with Athenian Institute of Anthropos, Athens (Greece).

A review of the results obtained when a variety of new techniques for the analysis of the way a person perceives his social environment is applied to the comparison of two cultural groups reveals some basic similarities in the obtained results. The analysis of subjective culture is likely to help in the understanding of transcultural conflict, as well as in the development of theory concerning interpersonal attitudes, interpersonal behavior, and conflict resolution.

464. THE SIGNIFICANCE OF ROLE BEHAVIOR DIFFERENTIATION FOR CROSS-CULTURAL INTERACTION TRAINING. Foa, Uriel G. and Chemers, Martin M. In International Journal of Psychology v2 n1 p45-57 1967.

A theoretical analysis of role distinction development within and between social systems in traditional and modern cultures leads to the hypothesis that the former emphasizes role distinction within the same system while the latter emphasizes the distinction between comparable roles in different systems. This hypothesis is tested by a content study of a cultural training program (Cultural Assimilator) which seeks to better performance and interpersonal relations of individuals in heterocultural task groups. The program consisted of 55 problem episodes in which the trainees sought to discover the causes of conflict. These "critical incidents" have been described by persons with cross cultural experience or gathered from literature on the culture being considered. The results confirm the hypotheses and indicate that role distinction constitutes a crucial element in cross cultural training.

See also: 150, 151 use of programmed instruction "Culture Assimilator"; 194 influence of foreign visitors on host community; 219 education of foreign development technicians; 314 Canadian volunteer program in Jamaica; 351 training managers for overseas duty.

7500 INSTITUTIONAL SPONSORS

465. REPORT OF THE ACADEMIC ADVISORY COMMITTEE ON BIRKBECK COLLEGE. Birkbeck College, London (England). May 1967. 102p. Available from Birkbeck College, Malet Street, London W.C.1., England.

Birkbeck College, a non-residential School of the University of London, provides part-time education in arts and sciences, at first degree and graduate levels. Its departments and courses, student body, academic staff, facilities, and government were examined, together with future demands from mature students, the role of Birkbeck College in meeting these demands, and guidelines for expanding its physical plant. It was concluded that demand will increase, that Birkbeck should continue to serve such students, and that changes should be made in facilities, undergraduate course offerings, postgraduate study and research, and administrative organization. Included are a historical review, eight appendixes and 43 tables.

466. THE DEVELOPMENT OF THE ADULT EDUCATION PROGRAMS IN THREE SELECTED INSTITUTIONS IN ST. LOUIS, MISSOURI: A COMPARISON. Berdrow, John Richard. Indiana University. Ph.D.Thesis. 1968. 242p. University Microfilms Order Number 68-11,385, price in microfilm $3.15, in Xerography $11.05.

Growth patterns of adult programs in three universities were compared with regard to origin, purpose, expansion, support, student and teacher personnel, and determination of programs. Conclusions were: (1) programs in all three institutions evolved from community needs; (2) Washington University had a wider range of programs because of its range of disciplines and staff; (3) the financial deficiencies of each institution influenced program development, course offerings, tuition fees, and course enrollment; (4) financial assistance and programing provided by state and federal legislation influenced them periodically; (5) stable class attendance aided in the growth and development; (5) based on present trends, adult education in the St. Louis area will eventually surpass the combined enrollments in all other branches of education.

467. EFFECTS OF THE 1965 REVISION OF UNDERGRADUATE STANDARDS OF THE AMERICAN ASSOCIATION OF COLLEGIATE SCHOOLS OF BUSINESS ON EVENING COLLEGES. Barton, William David, Jr. Tennessee University. Ed.D.Thesis. 1967. 225p. University Microfilms Order Number 68-3727, price in microfilm $3.00, in Xerography $10.15.

The purposes were to determine the impact of the 1965 revised standards for the accreditation of undergraduate programs of the American Association of Collegiate Schools of Business (AACSB) upon evening college programs, and delineate implications for evening colleges. AACSB revised standards had little effect on evening programs of nine institutions; only two of the 26 institutions filed a flight plan with the AACSB; 14 made considerable use of regular full-time faculty in their evening programs prior to the revision of standards; four of the case-study schools reported an institutional commitment to the accreditation of each of their professional programs; and four felt that AACSB affiliation was vital.

468. THE AMERICAN INSTITUTE OF SACRED LITERATURE; A HISTORICAL ANALYSIS OF AN ADULT EDUCATION INSTITUTION. Beck, Kenneth N. June 1968. 365p. Available from Department of Photoduplication, the University of Chicago Library, Swift Hall, Chicago, Illinois 60637.

A history of the American Institute of Sacred Literature, from its beginning in 1880 as a correspondence school of Hebrew under William Rainey Harper until its dissolution at the University of Chicago Divinity School in 1948.

469. AN HISTORICAL ANALYSIS OF THE DEVELOPMENT OF SELECTED AREAS OF UNIVERSITY EXTENSION PROGRAMS IN THE UNITED STATES, 1900-1965, AS RELATED IN PROFESSIONAL LITERATURE. Jessup, Michael Hyle. George Washington University, Washington, D. C.

Ed.D.Thesis. June 1967. 189p. University Microfilms Order Number 67-15,933, price in microfilm $3.00, in Xerography $8.60.

The historical development of credit and noncredit courses, correspondence study, and conferences, institutes, and short courses in extension programs.

See also: 5400 ADULT HIGHER EDUCATION-ACADEMIC PROGRAMS; 5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION: 6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT; 7600 COOPERATIVE AND RURAL EXTENSION; 4 history of GI Bill; 54, 56, 57, 67 characteristics, motives, learning styles of various student groups; 72 College Level Exam Program; 73 predicting success of extension students; 88 ROTC; 94 student government in married student housing; 97 survey of evening college administrative practices; 98 quarter versus semester system; 99 organizational structure of evening degree program at Brooklyn College; 126, 127, 128 history, directory of residential centers; 136 teaching style in credit courses; 155 national study of correspondence study; 156 correspondence study completion rates; 180, 182 laboratory and sensitivity training; 200 telelecture and remote blackboard in Missouri Extension; 212 literature review on teacher training and recruitment; 244 army officer as student; 252 older adult as student; 253 administrative problems in programs for women; 260 characteristics of adult coed; 261 women and graduate study; 267 adult male undergraduates at Wayne State; 296 present state of Antigonish movement; 297 university urban affairs programs in Baltimore; 298 Title I in Tennessee; 299 planning study, Illinois Extension; 312 higher education and development in South-East Asia; 313 university extension in Nigeria; 355 Ohio State labor education program; 357 effect of change in German steel industry on technical universities; 369 characteristics of part-time students in a British college of further education; 387 MDTA program at Tuskegee; 401 secretarial programs, University of Cincinnati; 482 relations of universities with federal R & D labs.

7600 COOPERATIVE AND RURAL EXTENSION

See: 1890 RELATIONS WITH GOVERNING, ADVISORY, CLIENTELE GROUPS (Extension role perception studies); 2230 RURAL COMMUNITIES; 3050 DEMONSTRATION METHOD; 4000 TEACHERS, LEADERS, CHANGE AGENTS (nine Extension staff studies); 4100 ADMINISTRATORS (four studies of Extension staff); 6700 OCCUPATIONAL TRAINING-AGRICULTURE, HOME ECONOMICS; 7000 HOME, FAMILY, PARENT EDUCATION (seven Extension studies); 21 degree research in adult education and Extension, University of Wisconsin; 22 Cornell Extension dissertations, 1948-1966; 52 anomia related to contact with Extension; 133 programs for pesticide dealers; 190 in-depth teaching (workshops) in Extension; 218 job performance of Extension area specialists; 241 participation patterns of rural young adults; 256 interests, information sources of rural homemakers; 301 model for community resource development at state level; 305 characteristics and interaction in area redevelopment leadership group; 309 administrative problems of technical assistance to agricultural extension in developing nations; 311 Extension in Kumaonese (India) village; 362 microfiche collection of documents in vocational education.

7700 JUNIOR COLLEGES

470. AN EVALUATION OF THE EFFECTIVENESS OF THE JORDAN AND LAKEWOOD EXTENSION CAMPUS PROGRAMS OF LONG BEACH CITY COLLEGE. Jones, Richard L. 7 June 1968. 51p. EDRS Order Number ED 022 457, price in microfiche $0.25, in hard copy $2.65.

The effectiveness of instruction at the Jordan and Lakewood Extension Campuses

of Long Beach City College was examined by questionnaire and interview. The extension students and evening graduates were all asked how many classes they were taking, why they were attending, and where they heard of the program; the extension students were also asked what other courses they would like to see offered and the evening graduates were asked what subjects were most helpful, how they rated course quality, what comments or criticisms they had, and whether they planned to continue.

See also: 74 performance of evening students in full-time study; 89 counseling in California junior colleges; 100 administrative practices in California; 204 credit course by television in health; 213 procedures for teacher resource allocation; 214 part-time vocational instructors in Michigan; 217 supervision, evaluation of new part-time instructors; 259, 262 women in junior college; 300, 302, 303 community services; 304 urban problems and junior college; 343 business and management programs; 364 vocational education needs, Goshen County, Wyoming; 365 occupational survey, Illinois; 402 guidelines for post-secondary distributive education in Ohio.

7800 PUBLIC SCHOOLS

471. PUBLIC SCHOOL ADULT EDUCATION. CURRENT INFORMATION SOURCES, NO.19. Syracuse University, New York. August 1968. 27p. ERIC Clearinghouse on Adult Education, National Association for Public School Adult Education Clearinghouse, Washington, D.C. EDRS Order Number ED 023 992, price in microfiche $0.25, in hard copy $1.45.

This annotated bibliography contains 36 indexed and abstracted entries, dated 1965-1968, and arranged under the following headings: 1) program administration, 2) training programs, 3) program descriptions and guides, 4) participants, 5) statistics and data, 6) historical studies, and 7) other studies and reports.

472. PUBLIC SCHOOL ADULT EDUCATION IN SELECTED NEBRASKA SCHOOLS. Lightbody, James Edgar. Nebraska University Teachers' College. Ed.D.Thesis. 1967. 277p. University Microfilms Order Number 67-9833, price in microfilm $3.60, in Xerography $12.60.

This study surveyed public school adult education in Nebraska--the rationales for adult education in Nebraska, the place of adult education in the public schools, the role of boards of education and school administrators, and the part played by the state and Federal governments. Findings included: (1) public schools should be providing adult education and should be comprehensive; (2) school superintendents must actively support adult education; (3) the Federal government has given public adult education support; (4) despite some noteworthy programs, public school adult education in Nebraska has not kept pace with national trends and has not been recognized as an integral part of the school systems; (5) Nebraska provides no financial aid to adult education.

473. IMMIGRANTS AT SCHOOL: NEW YORK CITY, 1898-1914. Berrol, Selma Cantor. City University of New York, New York. Ph.D.Thesis. 1967. 438p. University Microfilms Order Number 67-12,555, price in microfilm $5.60, in Xerography $19.80.

The objectives were to find what changes were made in the educational structure of the city under the pressure of Jewish and Italian immigrants, and to determine if there were any clues sixty years ago to the New York City schools of today. The period selected was 1898-1914. Part I gives the background for change; Part II deals with the changes themselves; and Part III evaluates the innovations and their implications. Among the innovations were the growth of kindergartens, high schools, and vocational schools; the start of after school recreational programs, and of

summer schools; the attempt to open the school to all children; the inclusion of subjects such as physical education and manual training; and the use of schools as social service agencies.

474. THE IMMIGRANT AND THE SCHOOL IN NEW YORK CITY; A PROGRAM FOR CITIZENSHIP. Farrell, John Joseph. Stanford University. Ed.D.Thesis. 1967. 196p. University Microfilms Order Number 68-6514, price in microfilm $3.00, in Xerography $9.00.

A study was made of immigrant education in New York City during the years 1895-1915 and its impact on American education. Citizenship education grew from a narrowly conceived course in 1900 to a total concept of public education by 1915, and changed further during and after World War I to meet the desire for national unity and the need for self-understanding. Teachers were often ineffective because of cultural bias and inadequate training and understanding. Parochial schools were important in transmitting national cultures; the Federal govenment, immigrant associations, churches, voluntary agencies and individuals greatly aided in Americanization. Immigrant education caused major changes in public education, including health programs, social studies programs, and new democratic teaching methods. The study concludes with an investigation of the Puerto Rican educational problem in New York City today.

See also: 4625 YOUNG ADULTS; 4750-4870 DISADVANTAGED GROUPS; 5230 ADULT BASIC EDUCATION; 6500-6850 OCCUPATIONAL TRAINING; 5 program development related to state fiscal policy in Michigan; 76 evaluation of armed forces educational experience; 84, 85 dropout studies in Toronto and Wellesley, Massachusetts; 90 evaluation of Los Angeles guidance program; 96 institutional arrangements in California in 1952; 137 effectiveness of teachers in adult vocational education; 207 national survey of 16mm films; 306 civil defense program; 310 secondary extension in India; 411 education about credit for agriculture teachers. .

7900 BUSINESS AND INDUSTRY

475. A YEARNING FOR LEARNING -- WHILE EARNING! A STUDY OF INDUSTRIAL EVENING EDUCATION IN NORTHERN ILLINOIS. Axford, Roger W. and Schultz, Robert W. In Training Development Journal v23 n3 p10-3 March 1969.

Responses by members of the Illinois Training Directors Association were analyzed. Of this group, 20 companies had, and 23 lacked training programs. Findings included: (1) companies prefer to offer training to employees only; (2) most courses are in technical subjects, first-line supervision, basic communications, and mathematics; (3) the two largest problems are finding teachers and a shortage of courses; (4) most companies find the evening program instruction good and the cost low, with support coming from top management and employees interested in comprehensive courses.

See also: 4635 OLDER ADULTS; 4650 EDUCATION OF WOMEN; 5700 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION; 6200 MANAGEMENT AND SUPERVISORY DEVELOPMENT; 6500-6850 OCCUPATIONAL TRAINING; 210 annotated bibliography on maintenance training media; 216 qualifications, educational needs of training directors; 243 policies in employment of retired military; 249 job redesign for older workers, studies in eight countries; 263 retraining of older female labor pool; 264 women's work patterns and vocational education needs, annotated bibliography; 266 patterns of female labor force activity; 315 Industrial Training Act and British engineering firm; 317 updating engineering skills.

8000 Armed Forces

476. A STUDY OF THE COMMISSION ON IMPLICATIONS OF ARMED SERVICES EDUCATIONAL PROGRAMS, 1945-1948. Price, Herbert Hamilton, Jr. Rutgers, The State University. Ed.D.Thesis. 1968. 173p. University Microfilms Order Number 68-8646, price in microfilm $3.00, in Xerography $8.00.

In 1945, the American Council on Education created the Commission on Implications of Armed Forces Educational Programs to study the armed forces education of World War II and its effects on civilian education worthy of adaptation and experimentation in peacetime civilian education have been explored. Significant events and issues considered by the Commission were explored, and the development of the Commission were reviewed. Specific aspects of its work (including merits and weaknesses of the intensive "G.I.Method", accelerated programs, program supervision and evaluation, language and area training, use of visual aids, integration of subject matter, and differences between special Army and Navy programs) were discussed in detail.

477. HISTORY OF THE ARMY GENERAL EDUCATIONAL DEVELOPMENT PROGRAM; ORIGIN, SIGNIFICANCE, AND IMPLICATIONS. Strehlow, Louis Harold. George Washington University, Washington, D.C. Ed.D.Thesis. 1967. 209p. University Microfilms Order Number 67-15,939, price in microfilm $3.00, in Xerography $9.45.

Adult education in the armed forces from prior to World War I to 1967 are reported. Previous to, and during, World War I, civilian welfare groups provided recreation and entertainment for soldiers. The army began taking responsibility for soldier morale by establishing a Morale Division in 1941 and organized the United States Armed Forces Institute. Literacy training was conducted during World War II. The Army Education Program provided correspondence courses, leisure time activities, counseling, and foreign language training. The present GED program, established in 1956, conducts off duty educational programs (elementary through graduate level courses) under civilian educators. The present educational level of Army personnel is the highest in history; the educational opportunities for soldiers will be considered one of the outstanding adult education innovations of the century.

478. RETENTION OF MILITARY SKILLS ACQUIRED IN BASIC COMBAT TRAINING. McDonald, Robert D. George Washington University, Washington, D.C. HumRRO. December 1967. 18p. Clearinghouse for Federal Scientific & Technical Information Order Number AD-663-785, price in microfiche $0.65, in hard copy $3.00.

Performance data were collected in the three general basic combat training (BCT) proficiency areas (rifle marksmanship, physical combat fitness, end of cycle tests) from independent groups of soldiers during BCT, during Advanced Individual Training (AIT), and combat support training (CST), and for permanent party personnel in the Army six to 12 months. Results indicated a general performance decrement over the one year period sampled. While these decrements were statistically significant, the percentage decrements from the BCT level were relatively small and their significance is open to question.

479. HUMAN RESOURCES RESEARCH OFFICE BIBLIOGRAPHY OF PUBLICATIONS AS OF 30 JUNE 1968. George Washington University, Alexandria, Virginia. HumRRO. September 1968. 295p. EDRS Order Number ED 027 472, price in microfiche $1.25, in hard copy $14.85.

A bibliography provides complete information about research publications from the Human Resources Research Office (HumRRO). It includes abstracts for many items; key word out of context indexing; author indexes; and AD numbers, indicating items available through the Clearinghouse for Federal Scientific and Technical Information.

See also: 1650 SELECTION, PREDICTION OF SUCCESS; 1700 RETENTION OF PARTICIPANTS; 2600-3200 INSTRUCTIONAL METHODS; 6100 PROFESSIONAL, TECHNICAL EDUCATION-OTHER (military officers); 6500-6850 OCCUPATIONAL TRAINING; 10 army education in Confederacy; 26 relation of intelligence and learning in enlisted men; 53 indices of leadership in ROTC; 93 measuring crossover of military to civilian skills;

244 retired officers as university students; 268 training methods for Group IV (low aptitude) trainees; 439 measurement of confidence in dangerous situations.

8050 Unions

See: 6300 LABOR EDUCATION

8100 Religious Organizations

480. ADULT RELIGIOUS EDUCATION - THE QUEST FOR "HOLY INSECURITY". Shaw, Robert Clyde. Wisconsin University. Ph.D.Thesis. 1967. 275p. University Microfilms Order Number 67-12,475, price in microfilm $3.35, in Xerography $11.70.

The purpose is to examine adult education policies of Protestant churches and to suggest adult education implementation. Included are a historical review of religious education in the twentieth century, an examination of research concerned with the learning potentiality of the middle-aged adult, and an overview of how the adult learns. Based on a questionnaire, a section examined the basic problems of adult education in the church. An effort is made to clarify educational assumptions and definitions before delineating the educational objective of religious adult education. A comparison of the views of various educators, philosophers, and psychologists is made and illustrative paradigms are offered. The "crisis" of middle age is an opportune time for religious educational efforts.

481. THE PHILOSOPHY OF ADULT EDUCATION OF THE ANGLICAN CHURCH OF CANADA. Peel, Donald Naylor. Indiana University. Ph.D.Thesis. 1967. 563p. University Microfilms Order Number 68-2342, price in microfilm $7.15, in Xerography $24.45.

The adult education philosophy of the Anglican Church of Canada was analyzed in terms of basic principles, cultural factors, concepts of maturity and of authority, characteristics of adult learners, teaching and leadership, group learning, and patterns of educational practice. Comparisons of Anglican positions were made with those in other philosophies of education. These were among the conclusions: (1) Anglican philosophy is essentialist-perennialist but has many progressivist-reconstructionist features; (2) the approach is reality-centered, incorporating learner needs and Church requirements; (3) the leader is depicted as dominating the planning of educational experiences; (4) the most serious lacks are a systematic statement of educational philosophy, a clear plan for church adult education, and an effective concept of authority.

See also: 6000 PROFESSIONAL CONTINUING EDUCATION-RELIGION; 10 religious education in Confederacy; 117 Appalachian attitudes toward religion, education and social change, bibliography; 118 rural-urban differences in Appalachian Presbyterians; 181 evaluation of human relations laboratory in United Church of Canada; 220 national conference of adult Jewish education; 240 ethical attitudes of young adult Protestants; 246 educational interests of older Presbyterian adults; 448 Christian theology especially for adults; 449 concepts in Lutheran adult education.

8200 Libraries, Museums

See: 289 survey of library service to functionally illiterate; 437 training aides in Queens Borough Public Library.

8250 Proprietary Schools

See: 2800 CORRESPENDENCE STUDY: 395 business school program for welfare recipients.

8500 Federal Government

482. EDUCATION AND THE FEDERAL LABORATORIES: AN ASSESSMENT OF FEDERAL LABORATORY EDUCATIONAL ACTIVITIES AND THEIR PRESENT AND POTENTIAL RELATIONSHIPS WITH UNIVERSITIES. Federal Council for Science and Technology, Washington, D.C. Committee on Federal Laboratories. March 1968. 90p. Clearinghouse for Federal Scientific and Technical Information Order Number PB-178-018, price in microfiche $0.65, in hard copy $3.00.

This study investigates the use of Federal research facilities for advanced education and training (1) to determine how well Federal laboratories are doing in continuing educational efforts, (2) to make recommendations for improvements, and (3) to explore the potential of Federal agencies in contributing more broadly to the educational activities of the Nation. Nine recommendations are made for extending collaborative relationships between government laboratories and universities, including stronger incentives and greater flexibility on the part of Federal laboratories in making their staffs and facilities available for teaching and research by students and faculty.

See also: 0150 LEGISLATION; 0175 FINANCE; 5230 ADULT BASIC EDUCATION; 6050 PROFESSIONAL, TECHNICAL CONTINUING EDUCATION-PUBLIC ADMINISTRATION: 6550 OCCUPATIONAL TRAINING-UNSKILLED, DISADVANTAGED; 8000 ARMED FORCES; 215 background and role of Federal employee development specialists.

8550 Correctional Institutions

See: 6850 OCCUPATIONAL TRAINING.

9000 INTERNATIONAL PERSPECTIVE IN ADULT EDUCATION

9020 International and Comparative Studies

See: 58 personal orientations and public affairs education in U.S. and Eastern European countries; 128 international directory of residential centers; 265 women's work in 34 nations classified by feminist ideology; 337 managerial training in Sao Paulo and Los Angeles; 346 marketing education in 21 countries; 354 differential development of workers' education in Britain and labor education in U.S.; 359 vocational education in ten countries; 370 national and historical studies of industry and vocational training in 12 countries.

9040 Developing Nations

See: 2210 COMMUNITY EDUCATION AND DEVELOPMENT; 5280 LITERACY TRAINING; 5550 COMMUNITY DEVELOPMENT PROGRAMS; 108 research trends in education for development; 111 research review on educational systems and social change; 308 International Community Development Statistical Bulletin.

9350 Canada

See: 50 Ontario Institute test of curiosity; 56 learning orientations of Guelph part-time B.A. students; 70 motivating adults for manpower training; 110 attitudes toward social change in rural area; 163 conference and abstracts on sensitivity training; 181 effects of programmed pretraining on laboratory training; 222 role perceptions and performance of agricultural extension agents in Nova Scotia; 257 educational needs of married, lower income in Vancouver; 272 participation of Ojibway Indians in voluntary agencies; 286 adult basic education teachers in Ontario; 296 present state of Antigonish movement; 314 Canadian volunteers in Jamaica; 481 adult education philosophy of Anglican Church.

9400 Latin America

484. AMANDA LABARCA H., EDUCATOR TO THE WOMEN OF CHILE; THE WORK AND WRITINGS OF AMANDA LABARCA H. IN THE FIELD OF EDUCATION IN CHILE; THEIR VALUE IN THE PROGRESS OF EDUCATION IN CHILE, Paul, Catherine Manny. New York University, New York. Ph.D. Thesis. 1967. 210p. University Microfilms Order Number 67-11,120, price in microfilm $3.00, in Xerography $9.45.

This thesis reviews the life of Amanda Labarca, her educational work and writings. She can be classified as a positivist, integralist, and scientific humanist. Her contributions include: primary school textbooks; propagation of the educational philosophy of John Dewey; creation of the Seasonal Schools, which helped raise the national cultural level, especially among women; arousal of citizen interests in educational reforms; the Experimental School and its influence on secondary education; successes in women's rights and welfare (probably her foremost achievement); the impact of her association with the University of Chile; and service rendered to the Chilean government and the United Nations. Her "History of Education in Chile" is generally considered her most important book.

See also: 293 literacy training in Brazil; 314 Canadian volunteers in Jamaica; 337 management education in Sao Paulo and Los Angeles; 370 history of craft and industrial training in Brazil/industrial training in Venezuela.

9500 Europe

See: 58 personal orientations and public affairs involvement in United States, Czechoslovakia and Yugoslavia; 135 retraining older workers in OECD Countries; 249 job redesign for older workers in OECD countries; 359 vocational education in U.S. and nine European nations; 370 national and historical studies of industrial education in France, Netherlands, West Germany, Great Britain, USSR.

9520 Great Britain

See: 68 student attitudes in Reading adult education centers; 157 correspondence study and audio visual aids in Merchant Navy; 202 BBC research, 1952-1963; 315 effects of Industrial Training Act on a Manchester engineering firm; 339 identifying supervisory training needs; 361 Ministry of Technology R & D Abstracts; 369 vocational evening students in a college of further education; 414 research use in British agriculture; 429 trainability tests for older workers; 465 Birkbeck College advisory committee report.

9530 Scandanavia

485. FOLK HIGH SCHOOLS IN SWEDEN. Fleisher, Frederic. The Swedish Institute for Cultural Relations with Foreign Countries, Halmstad (Sweden). 1968. 112p. Available from The Swedish Institute, Hallandspostens Boktryckeri, Halmstad, Sweden.

In this document on Swedish folk high schools, the history, philosophy, types of programs, backgrounds of past and present students, adjustment to a changing society, and the implications for the future, are presented.

See also : 345 evaluation of management education.

9540 Germany

See: 357 Technological change and adjustment of technical universities.

9570 Yugoslavia

See: 413 agricultural education

9650 Near East

See: 150 programmed instruction in cross cultural training, Iran; 363 cooperative education in Iran.

9700 Africa

486. ADULT EDUCATION IN AFRICA. Current Information Sources, Number 12. ERIC Clearinghouse on Adult Education, Syracuse, New York. February 1968. 19p. EDRS Order Number ED 019 565, price in microfiche $0.25, in hard copy $1.05

Twenty-three abstracts and annotations of recent (1962-67) publications on adult education in Africa.

See also: 152 programmed learning in Central Africa; 223 educational needs of extension agents in Nigeria; 309 problems of technical assistance to Nigeria; 313 university extension in Nigeria.

9800 Asia

487. THE ROLE OF EDUCATION IN THE SOCIAL AND ECONOMIC DEVELOPMENT OF JAPAN. Japanese National Commission for Unesco, Tokyo. February 1966. 437p. Available from Ministry of Education, Tokyo, Japan.

Emphasis in this study of Japanese education since 1868 was on interactions between industrialization and education, the development of a national school system, the rise of vocational education, the foundation and direction of economic and educa-

tional development, and case studies of modernization and education in Hokkaido, Nagasaki, and Okayama.

488. ADULT EDUCATION IN ASIA, AUSTRALIA, AND NEW ZEALAND. Current Information Sources, Number 13. ERIC Clearinghouse on Adult Education, Syracuse, New York. February 1968. 34p. EDRS Order Number ED 018 705, price in microfiche $0.25, in hard copy $1.80.

The 45 abstracts in this bibliography cover the period 1963-67.

See also: 134 adoption practices of Indian farmers; 292 bibliography of literacy research in India; 311 agricultural extension in a Kumaonese (India) village; 312 high level manpower development in South-East Asia; 370 industrial training in China, industrial education in Japan since 1872.

9950 Australia, New Zealand

489. CHANGES IN THE ADMINISTRATION OF ADULT EDUCATION IN NEW ZEALAND, 1946-1962. Power, Hilton M. 21p. In The Journal of Educational Administration v6 n1 p52-68 May 1968.

490. BIBLIOGRAPHY OF AUSTRALIAN ADULT EDUCATION, 1835-1965. Crew, Vernon. National Library of Australia, Canberra; Australian Association of Adult Education. 1968. 114p. EDRS Order Number ED 023 024, price in microfiche $0.50, in hard copy $5.80.

See also: 488 bibliography on adult education in Australia, New Zealand.

AUTHOR INDEX

(References are to item numbers)

Abbey, David S. 70
Abbott, George Carlyle 121
Abrahams, Norman M. 79
Ackerman, Leonard 215
Adams, Don 111
Adams, Hobart Warner 350
Adams, Janet 111
Addis, Margaret Emily 253
Adkins, Winthrop R. 391
Agger, Robert E. 58
Ahmad, Dabir 310
Alan, Mubarka 84
Alexander, Frank D. 233, 419, 452, 453, 454
Alford, Harold Judd 126, 127
Allyn, Nathaniel C. 72
Altman, James W. 1
American Institute for Research in the Behavioral Sciences 141
American Society for Personnel Administration 379
Anderson, Robert C. 123
Anttonen, Elmer Soini 5
Applebaum, Leon 355
Aparicio, Kathryn 116
Arnold, Hubert Merrell 447
Askins, Billy Earl 149
Association of University Evening Colleges 97

Bailey, Wilfrid C. 115
Baldwin, Robert O. 426, 427
Barclay, James R. 325
Barrett, Gerald V. 36
Bartlett, Willis Edward 81
Barton, William David, Jr. 467
Batchilder, Richard L. 183
Beaudoin, Adrien P. 302
Beck, Kenneth N. 468
Bedrow, John Richard 466
Belasco, James Alan 45
Belson, W. A. 202
Bemis, Stephen E. 77
Benne, Max Erwin 194
Berke, Norman Daniel 278
Berkshire, James R. 434
Berrol, Selma Cantor 473
Besen, Stanley M. 376
Bialek, Hilton 86
Bills, Garland 124
Birkbeck College 465
Bird ,Michael W. 339
Blackburn, Donald J. 8, 130
Blair, Carol Ann 433
Blake, Robert R. 335
Blaney, John P. 142
Blume, Paul R. 393
Boggs, Gerald Eugene 390
Bolman, Lee 182
Booth, Alan 71
Booth, Richard E. 434
Borus, Michael E. 381
Bothwell, James Lowe 40
Boyles, Wiley R. 439
Brewer, Donald D. 433
Bright, Don Emerson 401
Bringle, Ronald Royce 168
Brinker, Paul A. 342
British Council, London 291
Brooke, W. Michael 286
Brown, Don A. 282
Brown, Emory J. 192, 193, 256, 416
Bruce R. L. 414
Brunner, Edmund DeS. 17
Buehler, Charlotte 44
Buehler, Roy E. 384, 394
Buila, Theodore 413
Burke, John Miles 337
Bush, Madge Morgan 450
Byrd, Richard E. 175

Callon, Lawrence Brian 139
Campbell, Boyd P. 207
Campbell, John P. 176
Campbell, Ralph 396
Canaday, Martha Helen 255
Capling, R. G. 163
Carlson, Robert Andrew 16, 205A
Carpenter, William L. 28, 29
Carter, G. L., Jr. 221, 229
Carterette, Edward C. 33
Carver, Alfred 157
Carver, Ronald P. 26
Cattell, Raymond B. 34
Chemers, Martin M. 151, 464
Chicago University 128
Clark, Burton R. 96
Clark, Gerald E., Jr. 284
Clum, George A. 87
Cobb, Henry V. 274
Cochran, George Clark 392
Cohen, David M. 316
Colley, Louise Annie 41 , 42
Collie, Anne 68
Collins, Joseph W., Jr. 441
Community Development Foundation 308
Cornell University 22
Cortright, Richard Watkins 138
Cotton, Webster E. 2

Council of Teaching Hospitals Association of American Medical Colleges 430
Crabtree, James Stephen 368
Crawford, Elisabeth T. 334
Crew, Vernon 490
Culbertson, Millicent Kicklighter 306

Dakin, William Robert 69
Dalby, J. Philip 98
Dapra, Richard A. 53
Davis, James A. 173
Davis, Vivienne 68
Day, H. I. 50
DeCrow, Roger 19
Dillavow, George J. 12
Dimock, Hedley G. 140
Dodge, Larry D. 364
Dollins, Curtin Nels 159
Donehower, Grace M. 156
Dooley, Bobby Joe 57
Dopp, Arvid D. 104
Douglah, Mohammad A. 66, 104, 130
Downs, Sylvia 429
Doyle, Louis A. 313
Drennan, Henry 289
Drescher, Ruth 458
Dubin, Samuel S. 316
Du Bois, Philip H. 26, 132, 136
Dunnette, Marvin D. 165, 176
Dutton, Marion Donnie 277
Duval, Louise 110

Easton, Edison E. 341
ERIC/AE 18, 20, 38, 245, 486, 488
Erickson, Mildred Brinkmeier 67
EVCO 208
Farahbakhsian, Ebrahim 263
Farrell, John Joseph 474
Fay, Francis Anderson 43
Federal Council for Science and Technology 482
Feinstein, Sara 220
Fiebert, Martin S. 164
Fiedler, Fred E. 150
Findlay, E. Weldon 225
Fink, Varlyn David 231
Flaherty, M. Josephine 73
Fleisher, Frederic 485
Fleming, John E. 188
Foa, Vriel G. 464
Franklin, Richard 109
Freeman, Richard Taylor 122
Friedlander, Frank 177, 178
Fullerton, Leroy Robert 244
Funk, C. Dennis 221

Garbin, A. P. 239
Garrett, Pauline Gillette 456
Gates, Jesse L. 1
Geerlofs, Marjorie White 295
George Washington Univerisity 436, 479
Gianturco, Judith 279
Goff, Maurice L. 366
Goldberg, Alvin A. 174
Golembiewski, Robert T. 166
Gordon, Ira J. 457
Gossage, Loyce Clyde 216
Gough, Lowell A. 409
Grabowski, Stanley 19
Green, Ralph 404
Greenleigh Associates, Inc. 3
Grell, Darrell Dean 385
Griessman, B. Eugene 114
Griffith, Albert V. 54
Groteleuschen, Arden 148
Grunwald, Walter 209
Guilford, J. P. 23, 24
Gurin, Gerald 380

Hackel, Alan S. 212
Hadley, Herber Harlan 105
Haller, Lola Marie 326
Halpern, Doryan 248
Hankin, Edward K. 281
Hankin, Joseph Nathan 304
Hannin, Daniel 272
Hardwick, Arthur Lee 435
Hardy, James H. 183
Harris, Ward A. 347
Harter, Walter George 417
Hartman, Joel 192
Hawkridge, D. G. 152
Heinberg, Sylvester 217
Herzog, William Adam, Jr. 293
Hiatt, Peter 289
Hoerner, Harry J. 91
Hole, Floyd Marvin 234
Hooprich, Eugene A. 397
Horn, John L. 34
Hornbostel, Victor O. 389
Hughes, Edward 369
Hughes, Robert G. 107
Hurkamp, Rosemary C. 85
Hunt, Beverly English 259
Hunter, David E. 307
Hunter, Guy 312
Hunter, Starley 451
Hunter, Woodrow 161, 251

Illinois University 299
Indian Adult Education Association 292
Ingham, Joy J. 95
International Labour Office 360
Ivancevich, John M. 351

Jabury, Donald Eugene 254
Jacobson, Myrtle S. 99
Jadao, Fausto, Jr. 56
Janovy, David Lee 247
Japanese National Commission for UNESCO 487
Jawanda, J. S. 59
Jeffs, George A. 184
Jensen, Alvin Carl 243
Jerkedal, Ake 345
Jessup, Michael Hyle 469
Joern, Judith B. 418
Johnson, Kirk A. 145, 426, 427
Johnson, Jimmy P. 232
Johnson, Louise A. 387
Johnson, Raymond L. 191
Johnstone, William Milton 240
Jones, Charles Irving 137
Jones, Dorothy L. 27
Jones, Margaret Hibbard 33
Jones, Richard L. 470
Jones, Sheila 206
Jurkowitz, Eugene I. 93

Karnes, Merle B. 460
Kauffman, Earl 252
Kaufman, Charles Wesley 263
Kausler, Donald H. 60
Keddie, Wells H. 353
Keim, William 303
Kimball, Kenneth Robie 445
Kirk, William Donald 276
Klever, Gerald L. 329
Kling, Martin 295
Knittel, Robert Edward 112
Knop, Edward 116
Knox, Alan B. 39, 71
Kohl, Fred E. 229
Kolb, David A. 186
Krafft, Larry John 171
Kraft, Richard Horst Paul 357
Kreider, Leonard Emil 338
Kreitlow, Burton W. 15

Lair, Charles V. 60
Langdon, Charles Watson 386
Lanham, Orville E. 193
Lantz, Joanne 260
Laubach, Robert S. 288
Lauwerys, Joseph A. 370
Lee, Sylvia L. 264
Lee, Walter Sidney 172
Leinhardt, Samuel 173
Levy, C. Michael 37
Liander, Bertil 346
Lightbody, James Edgar 472
Lind, Marvin Burdett 305
Liveright, A. A. 9
London, H. H. 383
Long Beach City College 204
Long, Huey B. 51, 331
Looby, Lawrence 133
Lucas, Stephen Rodney 402
Lutz, Arlen E. 190
Lysaught, Jerome H. 154

Macdonald, Mairi St. John 92
MacKenzie, Ossian 155
MacLennan, Donald W. 201
Madden, Howard L. 82
Mandell, Wallace 443
Mangum, Gorth L. 375
Marbach, G. 249
Marsh, C. Paul 52
Marshall, M. E. 147
Martin, John E. 102
Martin, Margaret R. 287
Mather, Mary E. 420
Massachusetts State Advisory Council on Education 6
Mayer, Ralph E. 410
McClelland, W. A. 422, 423
McCluskey, Michael R. 144
McCormick, Robert W. 230
McCune, Shirley D. 328
McDonald, Robert D. 478
McKie, Douglas 142
McNally, Gertrude B. 266
McNamara, John Harold 403
McNeil, Michael 86
Mehta, Ratan Chand 235
Mendelsohn, Harold 205
Menlo, Allen 14, 106
Merrill, Irving R. 203
Messerschmidt, Dale Harvey 214
Michaelsen, Leon Claude 228
Miller, Ann R. 356
Miller, Justin H. 294
Mills, Beatrice Marie 246
Mills, Edgar W. 328, 330
Ministry of Technology, Great Britain 361
Mocker, Donald W. 200
Moment, David 336
Morehouse, Ralph Ernest 222
Morgan, Homer G. 319
Morton, Paul Wesley 300
Mosher, Frederick C. 332
Moss, Gwenna 66
Moulton, Jane S. 335
Murphy, James T. 74

NAEC 471
National Communicable Disease Center 129, 196
National Institute for Mental Health 432

Naylor, James C. 146
Neale, J. G. 153
Nelsen, Anne K. 117
Nelsen, Hart M. 117, 118
Newman, Anabel P. 282
New York State Education Department 275
Norgren, Paul H. 317
Northern Illinois University 365

O'Connor, Johnson 25
Oden, Melita H. 31
Ohannessian, Sirarpi 283
Ohio State University 362
Ohliger, John 195
Olson, Keith W. 4
Organization for Economic Cooperation and Development 135
Orr, John David 120
Orr, Rodney Gerry 270
Oxford, Roger W. 475

Parlette, Nicholas 324
Parnes, Herbert S. 242
Patten, Thomas H., Jr. 284
Paul, Catherine Manny 484
Payne, Raymond 115
Pearce, Frank C. 343
Peel, Donald Naylor 481
Pelton, Warren G. 198
Pennsylvania State University 340
Perry, Lucy C. 323
Persons, Edgar A. 406, 408
Peterson, Peter Barron 333
Phipps, Lloyd J. 411
Plag, John A. 80
Plant, Walter T. 46
Pletsch, Douglas H. 224
Ponder, Edward Gene 444
Portin, James Jennings 158
Potter, Helen R. 88
Power, Hilton M. 489
Preston, James Clarence 301
Preston, James Dene 113
Price, Herbert Hamilton, Jr. 476
Priester, Jeanne 455
Prophet, Wallace W. 211
Pucel, David J. 382
Puder, William H. 10
Purcell, Mary Lou 461

Quackenboss, Thomas C. 352
Queens Borough Public Library 437

Randolph, H. Helen 125
Rapton, Avra 273
Regional Planning Councel 297
Rehabilitation Research Foundation 442
Reid, Christopher 201
Ribich, Thomas I. 373
Rich, Nolan Neel 103
Richardson, Robert Brooks 358
Rieck, Robert E. 410
Riegel, Klaus F. 63
Riegel, Ruth M. 63
Rieger, Jon H. 123
Roberts, Higdon C. Jr. 355
Roberts, Tommy L. 388
Robinson, James William 354
Rolloff, John August 407
Rominger, Roger Kyle 185
Rose, Harold 179
Rosen, Ned A. 372
Rosenberg, Sidney 391
Rosenblatt, Aaron 459
Ross, Edith 61, 62
Rowe, Harold R. 409
Rubin, Irwin M. 319
Ryan, Richard E. 353
Ryska, John W. 89, 100

Sacks, Florence 320
Sacks, George A. 320
Safa-Ishfahani, Manoucherhr 309
Salop, Phyllis, A. 145
Sanrval, R. D. 311
Sapienza, Dunnovan L. 371
Saylor, John C. 379, 398
Scanlon, David G. 370
Schaeffer, Geraldine 404
Scheier, Elaine 197
Schissell, Robert F. 258
Schlesinger, Benjamin 314
Schlossberg, Nancy K. 267
Schroeder, Mary Doris 227
Schroeder, Wayne L. 371
Schultz, Robert W. 475
Scyphers, Evans Reece, Jr. 226
Searle, Stanley H. 181
Sharma, Devendra Kumar 134
Shaw, Robert Clyde 480
Shearman, John 13
Shearon, Ronald W. 238
Shelton, John Alton 367
Shively, Harold E. 7
Shoulders, Betty 262
Showel, Morria 199
Shuford-Mossengill Corporation 78
Simon, J. R. 64
Sio, Arnold A. 314
Sjogren, Douglas 65
Slocum, John W., Jr. 180
Smith, George Watson 101
Sollie, Carlton R. 232
Somers, Gerald G. 250, 374, 377
Southern, Mara L. 46

Sowder, Ellie Mae 296
Spaulding, Seth 108
Sperling, Gordon James 449
Spray, S. Lee 322
Standlee, Lloyd S. 379, 398
Steffer, Robert Wesley 160
Steinemann, John H. 268, 425
Stern, Harris W. 162
Stevenson, William W. 91
Stewart, Robert Miller 90
Stoddard, Paul Wakelee 11
Stoer, Leopold 431
Stolz, Walter 124
Stotts, Michael J. 285
Strang , Ruth 280
Stratton, Albert J. 32
Strehlow, Louis Harold 477
Stretch, J. A. 315
Sugden, Virginia M. 344
Sullivan, Clyde E. 443

Tallmadge, G. K. 131
Tayloe, Ralph Chester 213
Taylor, Edward Bunker 327
Taylor, Eugene W. 415
Taylor, Jean Anne M. 261
Taylor, Theodore J. 119
Tedesco, Eleanor Hollis 400
Teevan, Richard C. 53
Tempel, Norman F. 94
Thede, Gaius Wendt 448
Thornton, Carl L. 36
Thumin, Fred J. 35, 48
Tolela, Michele 167
Tobin, P. 64
Torrence, John Thomas 440
Tough, Allen 55
Trail, Thomas F. 219
Trembly, Dean 25
Triandis, Harry C. 150, 463
Trickett, Wilson L. 349
Tupes, Ernest C. 83
Turner, Cornelius P., Ed. 76
Tweeten, Luther G. 269
Twelker, Paul A. 187

U.S.Air Force Human Resources Laboratory 75
U.S.Department of the Interior 462
U.S.Department of Labor 378

Valiquet, Michael I. 169
Valverde, Horace H. 210
Van Meter, Earl Leroy 236, 237
Vassilious, Vasso 463
Vincent, Norman L. 347
Vitola, Bart M. 82

Vizza, Robert F. 348

Waldron, Mark Woodsworth 241
Wallen, Carl J. 187
Wargo, John George, Jr. 405
Warlow, G. L. 56, 181
Warlum, Michael Frank 446
Warmbrod, J. Robert 412
Warner, Aaron W. 317
Warr, Peter V. 339
Warren, Hugh 359
Wasson, John B. 395
Webster, Daisy 257
Weede, Gary Dean 421
Weiner, E. L. 143
Weiner, Irving B. 321
Weinstein, Paul A. 93
Weisberg, Richard 441
Welch, Franklin Weldon 298
White, Shirley A. 49
White, Stroller Tod 428
White, William F. 25
Wiggins, Lee M. 459
Wilensky, Harold L. 265
Williams, Harold A. 207
Williams, Moyra 30
Williams , Sandiq Kolawole Taiwo 223
Wineberg, Ruth E., Ed. 290
Winter, J. Alan 330
Wisconsin State Employment Service 271
Wisconsin University 21
Woeste, John Theodore 218
Wohlford, Paul 162
Wood, Roy V. 174
Wright, E. N. 84

Yaryan, Ruby B. 203
Yates, Jules David 189
Young, Elma L. 438

Zahn, Jane 47
Zelikoff, Steven B. 318
Zenger , John Hancock 170
Zung, William W. K. 279

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